10/725346

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=> d his ful

     FILE 'REGISTRY' ENTERED AT 11:37:15 ON 12 DEC 2006
L5                STR
L7           50151 SEA SSS FUL L5
L8                STR
L9               3 SEA SUB=L7 SSS FUL L8
                   D STAT QUE L9
                   D CN 1-9

     FILE 'HCAPLUS' ENTERED AT 11:37:40 ON 12 DEC 2006
L10              1 SEA ABB=ON  PLU=ON  L9
                   D IBIB ABS HITSTR L10 1

     FILE 'REGISTRY' ENTERED AT 11:40:14 ON 12 DEC 2006
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L19             180 SEA SUB=L7 SSS FUL L18

     FILE 'HCAPLUS' ENTERED AT 11:40:48 ON 12 DEC 2006
L20              33 SEA ABB=ON  PLU=ON  L19
L21              32 SEA ABB=ON  PLU=ON  L20 NOT L10
                   D STAT QUE L21
                   D IBIB ABS HITSTR L21 1-32
L22               1 SEA ABB=ON  PLU=ON  "MUJICA TERESA"/AU
L23               5 SEA ABB=ON  PLU=ON  "MUJICA FERNAUD TERESA"/AU
L24               1 SEA ABB=ON  PLU=ON  "FERNAUD M TERESA MUJICA"/AU
L25             148 SEA ABB=ON  PLU=ON  ("BUCHHOLZ H"/AU OR "BUCHHOLZ H G"/AU OR
                   "BUCHHOLZ H V"/AU OR "BUCHHOLZ H W"/AU) OR ("BUCHHOLZ HERWIG"/A
                   U OR "BUCHHOLZ HERWIG A"/AU OR "BUCHHOLZ HERWING"/AU)
L26              37 SEA ABB=ON  PLU=ON  "CAROLA C"/AU OR "CAROLA CHRISTOPHE"/AU
L27              48 SEA ABB=ON  PLU=ON  "RAUTENBERG W"/AU OR "RAUTENBERG WILFRIED"/
                   AU
L28              32 SEA ABB=ON  PLU=ON  "SIRRENBERG CHRISTIAN"/AU
L29               2 SEA ABB=ON  PLU=ON  (L22 OR L23 OR L24) AND L25 AND L26 AND
                   L27 AND L28
L30               6 SEA ABB=ON  PLU=ON  (L22 OR L23 OR L24) AND (L25 OR L26 OR L27
                   OR L28)
L31              22 SEA ABB=ON  PLU=ON  L25 AND (L26 OR L27 OR L28)
L32               2 SEA ABB=ON  PLU=ON  L26 AND (L27 OR L28)
L33               2 SEA ABB=ON  PLU=ON  L26 AND L28
L34              21 SEA ABB=ON  PLU=ON  (L29 OR L30 OR L31 OR L32 OR L33) NOT (L10
                   OR L21)
                   D STAT QUE L34
                   D IBIB ABS HITSTR L34 1-21


     FILE REGISTRY
     Property values tagged with IC are from the ZIC/VINITI data file
     provided by InfoChem.

     STRUCTURE FILE UPDATES:   11 DEC 2006  HIGHEST RN 915185-72-7
     DICTIONARY FILE UPDATES:  11 DEC 2006  HIGHEST RN 915185-72-7

     New CAS Information Use Policies, enter HELP USAGETERMS for details.

     TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

       Please note that search-term pricing does apply when
       conducting SmartSELECT searches.
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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

FILE HCAPLUS

FILE COVERS 1907 - 12 Dec 2006 VOL 145 ISS 25
FILE LAST UPDATED: 11 Dec 2006 (20061211/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=>
=> fil reg
FILE 'REGISTRY' ENTERED AT 11:37:15 ON 12 DEC 2006

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7
DICTIONARY FILE UPDATES: 11 DEC 2006 HIGHEST RN 915185-72-7

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 30, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d stat que 19
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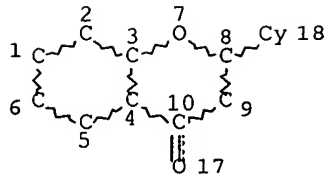
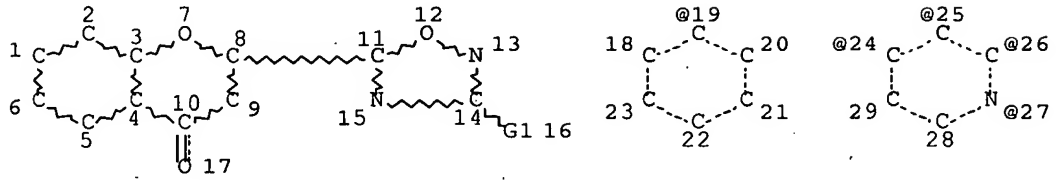


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L7 50151 SEA FILE=REGISTRY SSS FUL L5
L8 STR



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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
L9 3 SEA FILE=REGISTRY SUB=L7 SSS FUL L8

100.0% PROCESSED 3 ITERATIONS 3 ANSWERS
SEARCH TIME: 00.00.01

=> d cn 1-9

L9 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
CN 4H-1-Benzopyran-4-one, 6-hydroxy-2-[3-(2-pyridinyl)-1,2,4-oxadiazol-5-yl]-
(9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Hydroxy-2-[3-(pyridin-2-yl)-1,2,4-oxadiazol-5-yl]chromone

L9 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
CN 4H-1-Benzopyran-4-one, 2-[3-[4-(1,1-dimethylethyl)phenyl]-1,2,4-oxadiazol-
5-yl]-7-hydroxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 7-Hydroxy-2-[3-(4-tert-butylphenyl)-1,2,4-oxadiazol-5-yl]chromone

L9 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2006 ACS on STN
CN 4H-1-Benzopyran-4-one, 2-[3-[4-(1,1-dimethylethyl)phenyl]-1,2,4-oxadiazol-5-yl]-6-hydroxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 6-Hydroxy-2-[3-(4-tert-butylphenyl)-1,2,4-oxadiazol-5-yl]chromone

=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 11:37:40 ON 12 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Dec 2006 VOL 145 ISS 25
FILE LAST UPDATED: 11 Dec 2006 (20061211/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> s l9
L10   1 L9

=> d ibib abs hitstr l10 1

L10 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:470326 HCAPLUS Full-text
DOCUMENT NUMBER: 141:38618
TITLE: Preparation of oxadiazolylchromones as modulators of tyrosine kinase signal transduction.
INVENTOR(S): Mujica-Fernaud, Teresa; Buchholz, Herwig; Carola, Christophe; Rautenberg, Wilfried; Sirrenberg, Christian
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

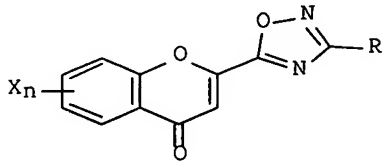
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1426372	A1	20040609	EP 2003-26103	20031113
EP 1426372	B1	20060111		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

DE 10256182	A1	20040624	DE 2002-10256182		20021202
AT 315564	E	20060215	AT 2003-26103		20031113
ES 2255654	T3	20060701	ES 2003-3026103		20031113
US 2004138464	A1	20040715	US 2003-725346		20031202
PRIORITY APPLN. INFO.:			DE 2002-10256182	A	20021202

OTHER SOURCE(S): MARPAT 141:38618

GI



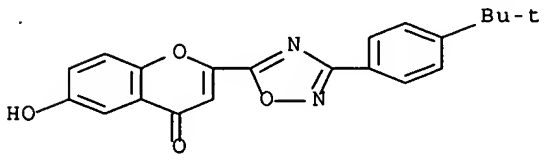
I

AB Title compds. [I; R = A, pyridyl, (substituted) Ph; X = H, OH, PhO, OA, O2CA, SO3H, OSO3H, OSO3A, halo, CO2H, CO2A, CONH2, NHSO2A, COA, CHO, SO2NH2, etc.; A = alkyl, fluoroalkyl; n = 1-4], were prepared Thus, 2,5-dihydroxyacetophenone and di-Et oxalate were heated 3 h at 80° in EtOH to give 6-hydroxy-2-ethoxycarbonylchromone. This was refluxed with aqueous HCl in HOAc to give 6-hydroxychromon-2-carboxylic acid. The latter in THF at -10° was treated with Et3N and iso-Bu chloroformate; after stirring for 1 h, 4-tert-butylbenzaldoxime in THF was added followed by stirring for 30 min. at room temperature and at reflux for 90 min. to give 6-hydroxy-2-[3-(4-tert-butylphenyl)-1,2,4-oxadiazol-5- yl]chromone. The latter inhibited Tie2 receptor tyrosine kinase with IC50 >10 μM.

IT 700813-20-3P, 6-Hydroxy-2-[3-(4-tert-butylphenyl)-1,2,4-oxadiazol-5-yl]chromone 700813-21-4P, 7-Hydroxy-2-[3-(4-tert-butylphenyl)-1,2,4-oxadiazol-5-yl]chromone 700813-22-5P, 6-Hydroxy-2-[3-(pyridin-2-yl)-1,2,4-oxadiazol-5-yl]chromone
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(claimed compound; preparation of oxadiazolylchromones as modulators of tyrosine kinase signal transduction)

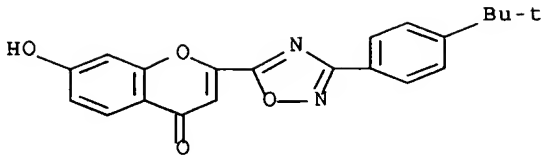
RN 700813-20-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[3-[4-(1,1-dimethylethyl)phenyl]-1,2,4-oxadiazol-5-yl]-6-hydroxy- (9CI) (CA INDEX NAME)

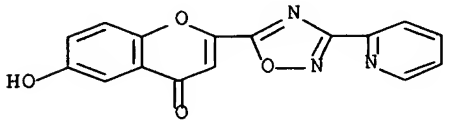


RN 700813-21-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[3-[4-(1,1-dimethylethyl)phenyl]-1,2,4-oxadiazol-5-yl]-7-hydroxy- (9CI) (CA INDEX NAME)



RN 700813-22-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-hydroxy-2-[3-(2-pyridinyl)-1,2,4-oxadiazol-5-yl]-
(9CI) (CA INDEX NAME)



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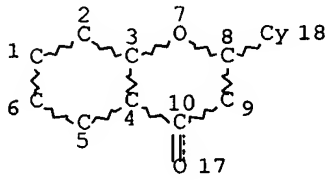
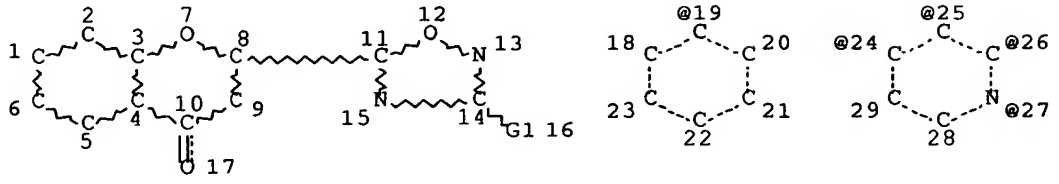


NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L7 50151 SEA FILE=REGISTRY SSS FUL L5
L8 STR



VAR G1=19/24/25/26/27
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
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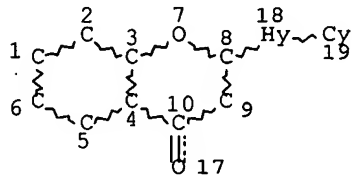
L10 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L18 STR



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GRAPH ATTRIBUTES:
RSPEC 8
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L19 180 SEA FILE=REGISTRY SUB=L7 SSS FUL L18
L20 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L19
L21 32 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L10

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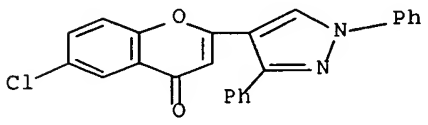
L21 ANSWER 1 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:61044 HCAPLUS Full-text
DOCUMENT NUMBER: 145:62845
TITLE: Synthesis of some 4-(2-hydroxy phenyl)-6-(1,3-diphenyl-1H-pyrazol-4-yl)pyrimidine-2(1H)-thiones and 2-(5-(1,3-diphenyl-1H-pyrazol-4-yl)-1H-pyrazol-3-yl) phenols
AUTHOR(S): Pawar, S. B.; Dalvi, N. R.; Karale, B. K.; Gill, C. H.
CORPORATE SOURCE: P.G. Department of Chemistry, S.S.G.M. College, Ahmednagar, 423 601, India
SOURCE: Indian Journal of Heterocyclic Chemistry (2005), 15(2), 197-198
CODEN: IJCHEI; ISSN: 0971-1627
PUBLISHER: Prof. R. S. Varma
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 145:62845
AB Compds. 2-(1,3-diphenyl-1H-pyrazol-4-yl)-4H-chromon-4-ones were refluxed in ethanol with thiourea and hydrazine hydrate in presence of potassium hydroxide to get title compds. 4-(2-hydroxyphenyl)-6-(1,3-diphenyl-1H- pyrazol-4-yl)-pyrimidine-2(1H)-thiones and 2-(5-(1,3-diphenyl-1H-pyrazol-4- yl)-1H-pyrazol-3-yl)phenols, resp.
IT 865428-57-5 865428-59-7 874968-05-5
890650-53-0 890650-57-4 890650-58-5

890650-59-6 890650-60-9 890650-61-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of (hydroxyphenyl)(diphenylpyrazolyl)pyrimidine-thiones and diphenylpyrazolyl-pyrazolyl-phenols by reaction of (diphenylpyrazolyl)-chromonones with thiourea or hydrazine hydrate)

RN 865428-57-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



RN 865428-59-7 HCAPLUS
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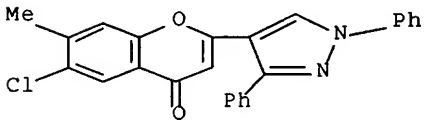
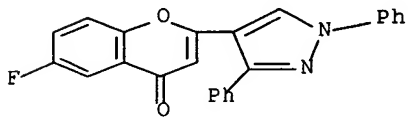
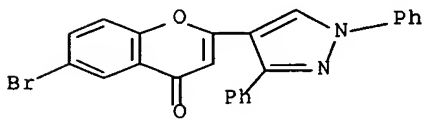


RN 874968-05-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-6-fluoro- (9CI) (CA INDEX NAME)



RN 890650-53-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-2-(1,3-diphenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



RN 890650-57-4 HCAPLUS
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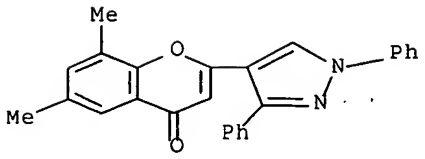

RN 890650-58-5 HCAPLUS
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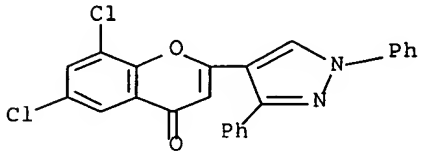
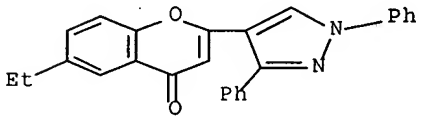
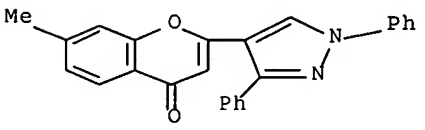


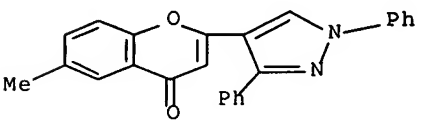
RN 890650-59-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-6-ethyl- (9CI) (CA INDEX NAME)



RN 890650-60-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-7-methyl- (9CI) (CA INDEX NAME)



RN 890650-61-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-6-methyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

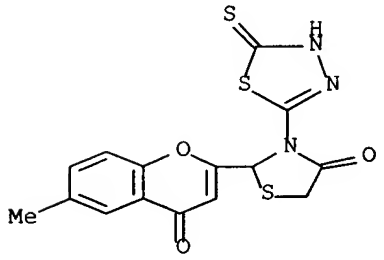
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1333336 HCAPLUS Full-text
DOCUMENT NUMBER: 144:369995
TITLE: The synthesis of 2-(chromon-2/3-yl)-3-(5-thione-4-hydro-1,3,4-thiadiazol-2-yl)-4-oxo- thiazolidine
AUTHOR(S): Yang, Gui-Hua; Cao, Ling-Hua; Cui, Peng-Yuan
CORPORATE SOURCE: Department of Chemistry, Xinjiang University, Urumqi Xinjiang, 830046, Peop. Rep. China
SOURCE: Journal of the Chinese Chemical Society (Taipei, Taiwan) (2005), 52(5), 1033-1036
CODEN: JCCTAC; ISSN: 0009-4536
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:369995

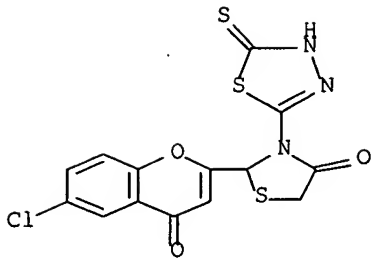
AB 2-Formylchromones and 3-formylchromones as the first materials singly reacted with 2-amino-5-mercapto-1,3,4-thiadiazole to give the corresponding Schiff bases, which on cyclocondensation with mercaptoacetic acid in 1,4-dioxane yielded target compds. named 4-oxo-thiazolidines. The structures of all the synthetic compds. were confirmed by elemental anal. and IR, 1H NMR, LC-MS (ESI) spectral data.

IT 882167-31-9P 882167-32-0P 882167-33-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 2-(chromonyl)-3-(thionehydrothiadiazolyl)-4-thiazolidinone starting from formylchromones and aminomercaptothiadiazole via cyclocondensation of Schiff bases with mercaptoacetic acid)

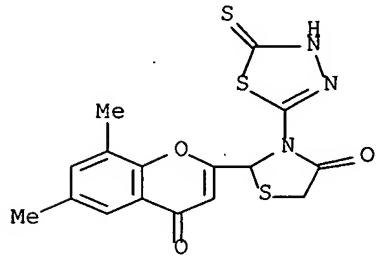
RN 882167-31-9 HCAPLUS
CN 4-Thiazolidinone, 3-(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



RN 882167-32-0 HCAPLUS
CN 4-Thiazolidinone, 2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-3-(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)- (9CI) (CA INDEX NAME)



RN 882167-33-1 HCAPLUS
CN 4-Thiazolidinone, 3-(4,5-dihydro-5-thioxo-1,3,4-thiadiazol-2-yl)-2-(6,8-dimethyl-4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



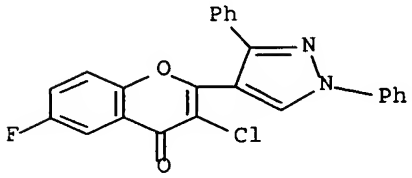
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:548822 HCAPLUS Full-text
DOCUMENT NUMBER: 144:192164
TITLE: Synthesis, characterization and antimicrobial activities of some fluorine-containing 2-(1-phenyl-3-aryl-1H-pyrazol-4-yl)-3-chlorochromones, 2-(1-phenyl-3-aryl-1H-pyrazol-4-yl)chromones and 5-(1-phenyl-3-aryl-1H-pyrazol-4-yl)-3-(2-hydroxyphenyl)-4,5-dihydropyrazolines
AUTHOR(S): Joshi, N. S.; Shaikh, A. A.; Deshpande, A. P.; Karale, B. K.; Bhirud, S. B.; Gill, C. H.
CORPORATE SOURCE: P G Dep. of Chemistry, SSGM College, Ahmednagar, 423 601, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (2005), 44B(2), 422-425
CODEN: IJSBDB; ISSN: 0376-4699
PUBLISHER: National Institute of Science Communication and Information Resources
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:192164
AB Base-catalyzed condensation of 4-fluoro-2-hydroxyacetophenone with 1-phenyl-3-aryl-4-pyrazolaldehyde gives 1-(5-fluoro-2-hydroxyphenyl)-3-(1- phenyl-3-aryl-1H-pyrazol-4-yl)-2-propen-1-ones (I). On oxidative cyclization with DMSO-CuCl2, I gives 2-(1-phenyl-3-aryl-1H-pyrazol-4-yl)-3- chloro-6-fluorochromones (II). On cyclization with DMSO-I2, I gives 2-(1-phenyl-3-aryl-1H-pyrazol-4-

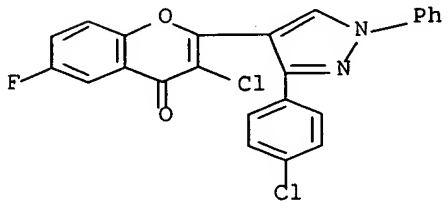
yl)-6-fluorochromones. When I is heated with N2H4 in dioxane, it gives 5-(1-phenyl-3-aryl-1H-pyrazol-4-yl)-3-(5- fluoro-2-hydroxyphenyl)-4,5-dihydropyrazolines (III). The products were characterized by spectral and elemental anal. Compds. I-III exhibited moderate antibacterial and moderate to high antifungal activities.

IT 874968-00-0P 874968-01-1P 874968-02-2P
874968-03-3P 874968-04-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation and antimicrobial activity of fluorinated pyrazolylchromones and pyrazolyl(hydroxyphenyl)pyrazolines)

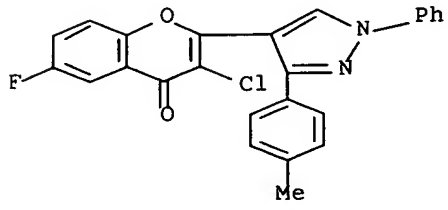
RN 874968-00-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-6-fluoro- (9CI) (CA INDEX NAME)



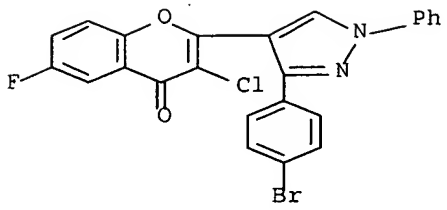
RN 874968-01-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-2-[3-(4-chlorophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-fluoro- (9CI) (CA INDEX NAME)



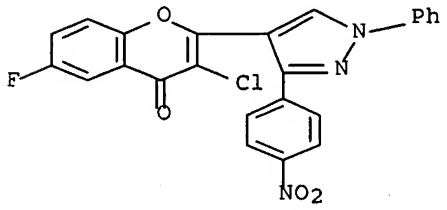
RN 874968-02-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-fluoro-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



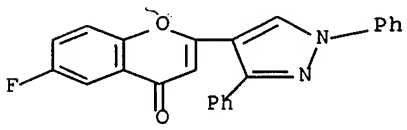
RN 874968-03-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3-(4-bromophenyl)-1-phenyl-1H-pyrazol-4-yl]-3-chloro-6-fluoro- (9CI) (CA INDEX NAME)



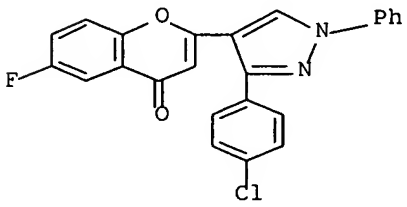
RN 874968-04-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-fluoro-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



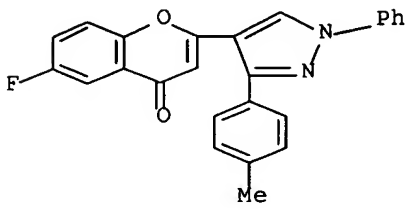
IT 874968-05-5P 874968-06-6P 874968-07-7P
874968-08-8P 874968-09-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and antimicrobial activity of fluorinated pyrazolylchromones and pyrazolyl(hydroxyphenyl)pyrazolines)
RN 874968-05-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-6-fluoro- (9CI) (CA INDEX NAME)



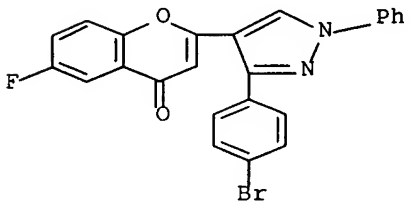
RN 874968-06-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3-(4-chlorophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-fluoro- (9CI) (CA INDEX NAME)



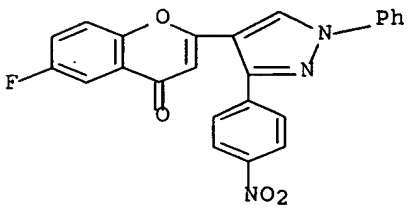
RN 874968-07-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-fluoro-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 874968-08-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3-(4-bromophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-fluoro- (9CI) (CA INDEX NAME)



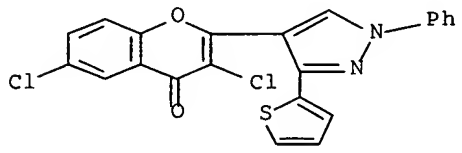
RN 874968-09-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-fluoro-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



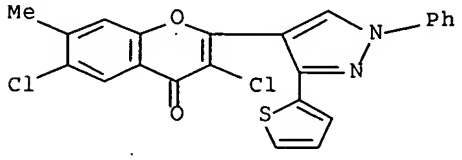
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 4 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:531809 HCAPLUS Full-text
DOCUMENT NUMBER: 144:192162
TITLE: Synthesis, characterization of some 1-(2-hydroxy-phenyl)-3-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-propenone, 3-chloro-2-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-chromon-4-one, and 2-(1'-phenyl-3'-thiophen-2-yl-3,4-dihydro-2H,1H'-[3,4]bipyrazol-5-yl)-phenol

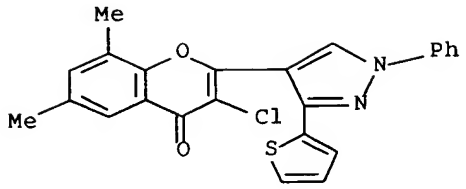
AUTHOR(S): Halnor, V. B.; Joshi, N. S.; Karale, B. K.; Gill, C. H.
CORPORATE SOURCE: P.G. Dept. of Chemistry, S.S.G.M. College, Kopargaon, 423 601, India
SOURCE: Heterocyclic Communications (2005), 11(2), 167-172
CODEN: HCOMEX; ISSN: 0793-0283
PUBLISHER: Freund Publishing House Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:192162
AB Base catalyzed condensation of 2-hydroxyacetophenones with thiophenylpyrazolylaldehyde gives compds., 1-(3,4,5-substituted-2-hydroxy-phenyl)-3-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-propenones. The propenone compds. on oxidative cyclization with DMSO-CuCl2 gives 3-chloro-2-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-chromon-4-ones. The propenone compds. on condensation with hydrazine hydrate gives 2-(1'-phenyl-3'-thiophen-2-yl-3,4-dihydro-2H,1H'-[3,4]bipyrazol-5-yl)- phenol 5. The products 3, 4 and 5 were characterized by IR, 1H NMR and mass spectroscopy.
IT 875143-92-3P 875143-94-5P 875143-96-7P
875143-98-9P 875144-00-6P 875144-02-8P
875144-04-0P 875144-06-2P 875144-08-4P
875144-10-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 1-(2-hydroxy-phenyl)-3-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-propenone, 3-chloro-2-(1-phenyl-3-thiophen-2-yl-1H-pyrazol-4-yl)-chromon-4-one, and 2-(1'-phenyl-3'-thiophen-2-yl-3,4-dihydro-2H,1H'-[3,4]bipyrazol-5-yl)-phenol)
RN 875143-92-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



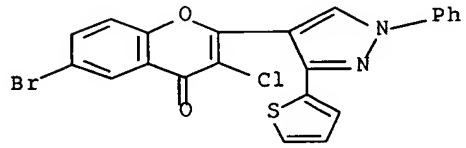
RN 875143-94-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-7-methyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



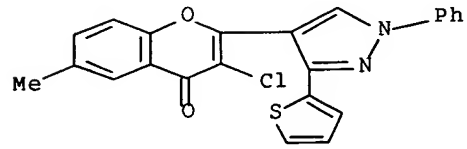
RN 875143-96-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6,8-dimethyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



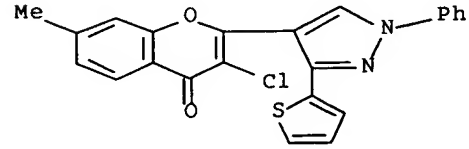
RN 875143-98-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-3-chloro-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



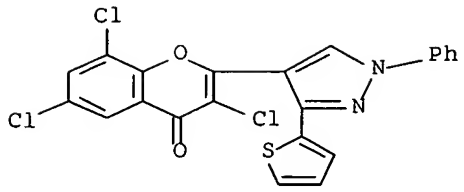
RN 875144-00-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-methyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



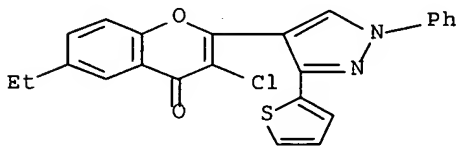
RN 875144-02-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-7-methyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



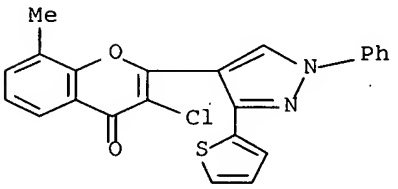
RN 875144-04-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6,8-trichloro-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



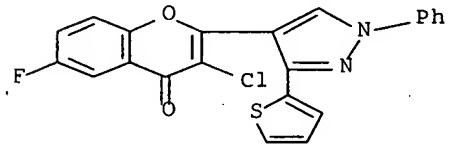
RN 875144-06-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-ethyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 875144-08-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-8-methyl-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



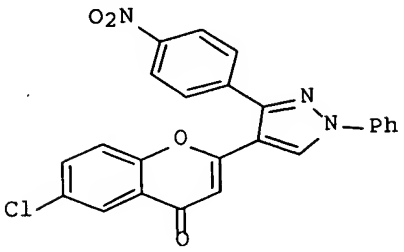
RN 875144-10-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-fluoro-2-[1-phenyl-3-(2-thienyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:111703 HCAPLUS Full-text
DOCUMENT NUMBER: 143:326281
TITLE: Synthesis of 2-(1,3-diphenyl-1H-pyrazol-4-yl)chromones and 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-bromochromones
AUTHOR(S): Bachute, R. T.; Karale, B. K.; Gill, C. H.; Bachute,

M. T.
CORPORATE SOURCE: Dept. of Chemistry, K.B.P. Mahavidyalaya, Pandharpur, India
SOURCE: Chemistry (Rajkot, India) (2004), 1(8), 552-554
CODEN: CHEMCT; ISSN: 0972-8376
PUBLISHER: Trade Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:326281
GI

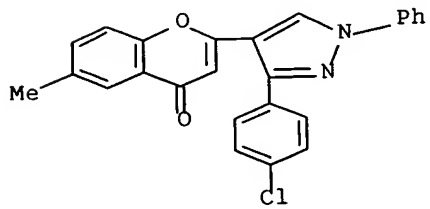


I

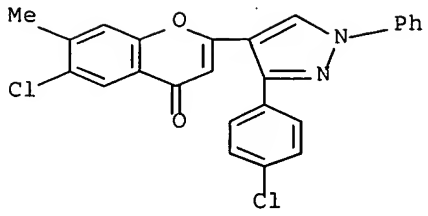
AB Base catalyzed condensation of o-hydroxyacetophenones with diarylpyrazolecarboxaldehyde gave compound [1-(2-hydroxyphenyl)-3-(1,3-diphenyl-1H-pyrazol-4-yl)-2-propen-1-one], which underwent oxidative cyclization to give 2-(1,3-diphenyl-1H-pyrazol-4-yl)chromone derivs., e.g., I. The products were characterized by TR, 1H NMR and mass spectroscopy.

IT 865428-41-7P 865428-43-9P 865428-45-1P
865428-47-3P 865428-49-5P 865428-51-9P
865428-53-1P 865428-55-3P 865428-57-5P
865428-59-7P 865428-61-1P 865428-63-3P
865428-65-5P 865428-67-7P 865428-69-9P
865428-71-3P 865428-73-5P 865428-75-7P
865428-77-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (diarylpyrazolyl)chromone derivs. via oxidative cyclization of diarylpyrazolylvinyl hydroxyaryl ketones)

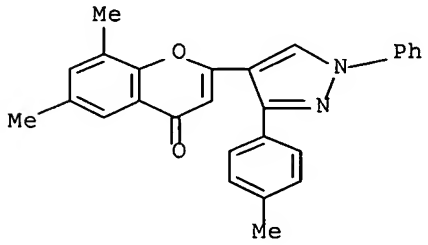
RN 865428-41-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3-(4-chlorophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-methyl- (9CI) (CA INDEX NAME)



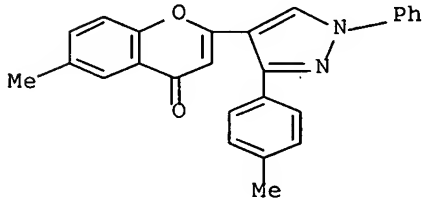
RN 865428-43-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-[3-(4-chlorophenyl)-1-phenyl-1H-pyrazol-4-yl]-7-methyl- (9CI) (CA INDEX NAME)



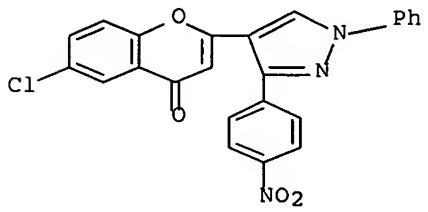
RN 865428-45-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6,8-dimethyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 865428-47-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-methyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

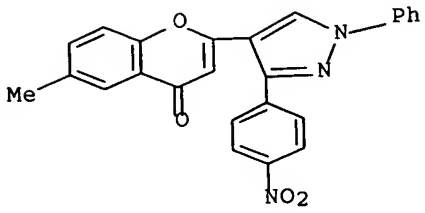


RN 865428-49-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

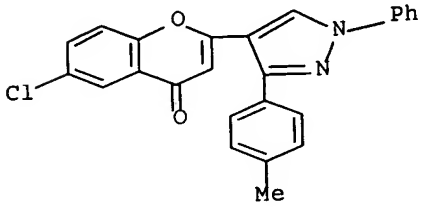


RN 865428-51-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-methyl-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-

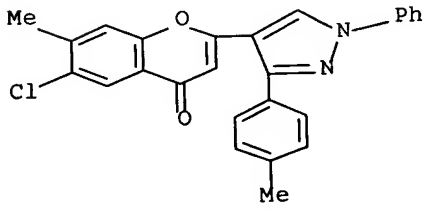
yl]- (9CI) (CA INDEX NAME)



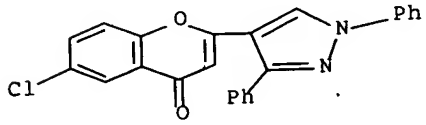
RN 865428-53-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



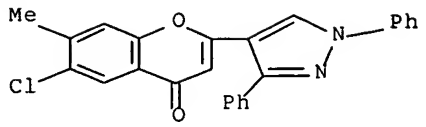
RN 865428-55-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-7-methyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



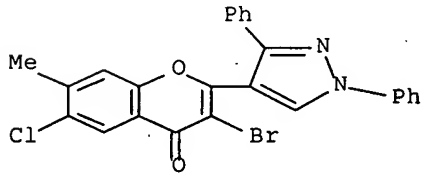
RN 865428-57-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)



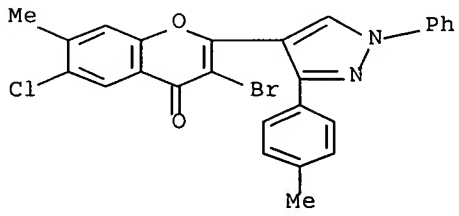
RN 865428-59-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-7-methyl- (9CI) (CA INDEX NAME)



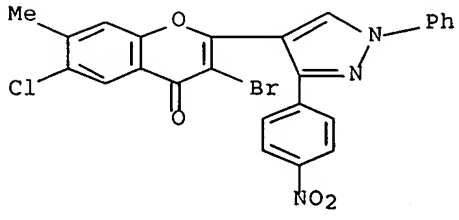
RN 865428-61-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-7-methyl- (9CI) (CA INDEX NAME)



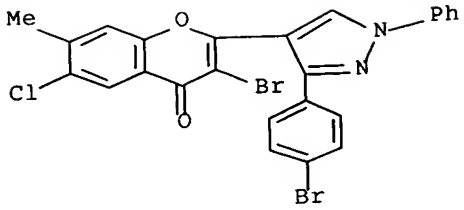
RN 865428-63-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6-chloro-7-methyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



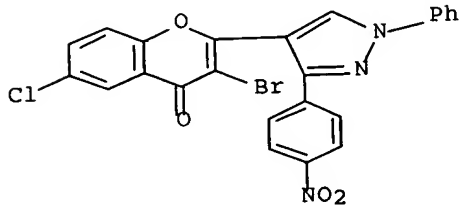
RN 865428-65-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6-chloro-7-methyl-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



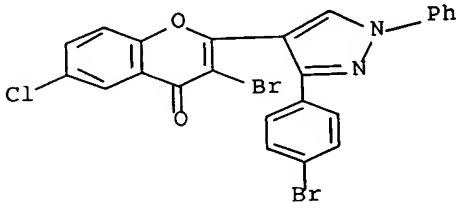
RN 865428-67-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-2-[3-(4-bromophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-chloro-7-methyl- (9CI) (CA INDEX NAME)



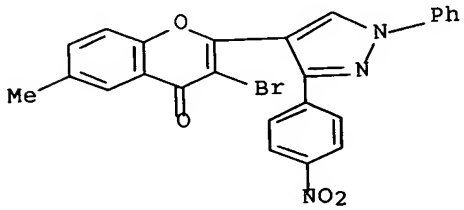
RN 865428-69-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6-chloro-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



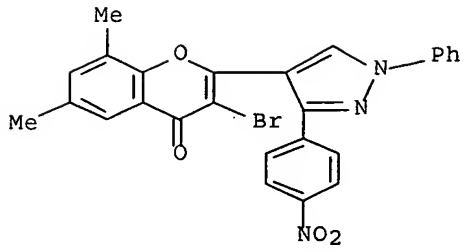
RN 865428-71-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-2-[3-(4-bromophenyl)-1-phenyl-1H-pyrazol-4-yl]-6-chloro- (9CI) (CA INDEX NAME)



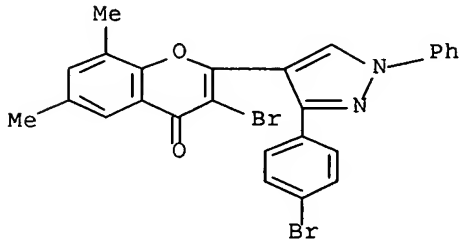
RN 865428-73-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6-methyl-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 865428-75-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-6,8-dimethyl-2-[3-(4-nitrophenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 865428-77-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-bromo-2-[3-(4-bromophenyl)-1-phenyl-1H-pyrazol-4-yl]-6,8-dimethyl- (9CI) (CA INDEX NAME)

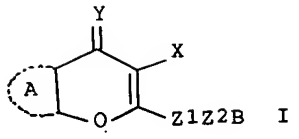


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 6 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:447089 HCAPLUS Full-text
DOCUMENT NUMBER: 141:14248
TITLE: Aromatic compounds as luminescent dyes and organic electroluminescent materials, and organic electroluminescent devices
INVENTOR(S): Sato, Wataru; Nakai, Toshimitsu; Yoneyama, Tomio
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004155665	A2	20040603	JP 2002-320191	20021101
PRIORITY APPLN. INFO.:			JP 2002-320191	20021101

OTHER SOURCE(S): MARPAT 141:14248
GI



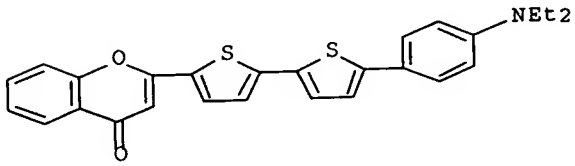
I

AB The compds. are I (A = 6-membered monocyclic or condensed polycyclic aromatic hydrocarbon or heterocycle residue; Y = O, CR1R2; R1, R2 = H, alkyl, 6-membered monocyclic or condensed polycyclic aromatic hydrocarbyl or heterocyclyl, etc.; X = H, substituent; Z1, Z2 = 5-6-membered monocyclic or condensed polycyclic aromatic heterocyclylene; B = electron-donating group). Organic electroluminescent devices preferably having emitter layers containing I as dopants show high luminescent intensity from yellow to red.

IT 696645-52-0P
RL: DEV (Device component use); IMF (Industrial manufacture); MOA (Modifier or additive use); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aromatic compds. as fluorescent dyes and organic electroluminescent materials for organic electroluminescent devices)

RN 696645-52-0 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[5'-[4-(diethylamino)phenyl][2,2'-bithiophen]-5-yl]- (9CI) (CA INDEX NAME)



L21 ANSWER 7 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:138349 HCAPLUS Full-text

DOCUMENT NUMBER: 141:243438

TITLE: Bromination and Azidation Reactions of 2-Styrylchromones. New Syntheses of 4(5)-Aryl-5(4)-(2-chromonyl)-1,2,3-triazoles

AUTHOR(S): Silva, Artur M. S.; Vieira, Judite S.; Brito, Cristela M.; Cavaleiro, Jose A. S.; Patonay, Tamas; Levai, Albert; Elguero, Jose

CORPORATE SOURCE: Department of Chemistry, University of Aveiro, Aveiro, 3810-193, Port.

SOURCE: Monatshefte fuer Chemie (2004), 135(3), 293-308
CODEN: MOCMB7; ISSN: 0026-9247

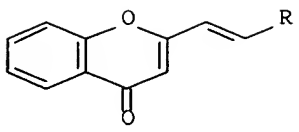
PUBLISHER: Springer-Verlag Wien

DOCUMENT TYPE: Journal

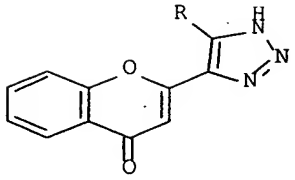
LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:243438

GI



I



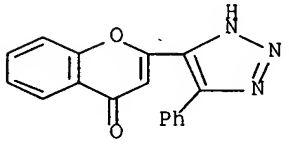
II

AB The bromination of 2-styrylchromones bearing electron neutral substituents, e.g. I (R = Ph, 4-ClC6H4, 4-MeC6H4, etc.), with two molar equivalents of pyridinium tribromide gave 2-(2-aryl-1,2- dibromoethyl)chromones and 3-bromo-2-(2-aryl-1,2-dibromoethyl)chromones. The presence of electron-donating substituents on the aromatic ring of the styryl moiety led to a mixture of compds. due to the higher reactivity of their C(2)=C(3) and Cα=Cβ double bonds, whereas the strongly electron-withdrawing groups hindered the bromination. The dehydrobromination of 2-(2-aryl-1,2-dibromoethyl)chromones with triethylamine gave a diastereomeric mixture of (E)- and (Z)-2-(α-bromostyryl)chromones. Novel 4(5)-aryl-5(4)-(2-chromonyl)-1,2,3- triazoles, e.g. II, have been obtained from the reactions of the corresponding 2-(2-aryl-1,2-dibromoethyl)chromones, 2-(α- bromostyryl)chromones, or 2-styrylchromones with sodium azide. The reactions of 2-styrylchromones I with sodium azide are more efficient, general, and constitute a one-pot synthetic method of 4(5)-aryl-5(4)-(2- chromonyl)-1,2,3-triazoles II allowing the preparation of 1,2,3-triazoles bearing either electron-donating or electron-withdrawing substituents in their aryl ring. The structure of all new compds. was established by extensive NMR spectroscopic studies.

IT 223508-99-4P 223509-01-1P 223509-06-6P
223509-12-4P 752233-21-9P 752233-22-0P
752233-23-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of (aryl)(chromonyl)triazoles via bromination and azidation of styrylchromones)

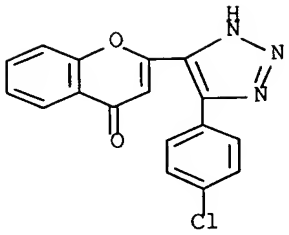
RN 223508-99-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(5-phenyl-1H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)

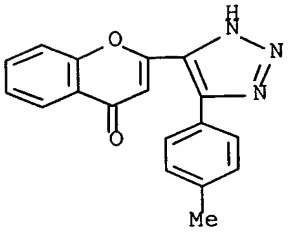


RN 223509-01-1 HCAPLUS

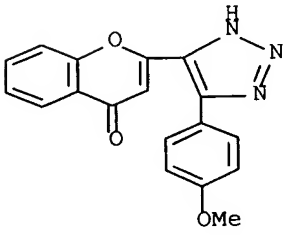
CN 4H-1-Benzopyran-4-one, 2-[5-(4-chlorophenyl)-1H-1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)



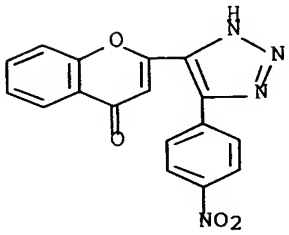
RN 223509-06-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-(4-methylphenyl)-1H-1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)



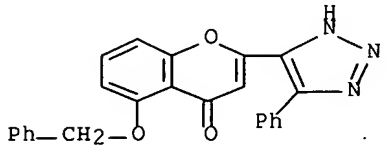
RN 223509-12-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-(4-methoxyphenyl)-1H-1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)



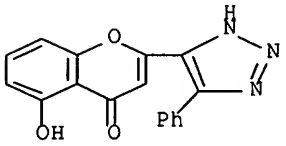
RN 752233-21-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(4-nitrophenyl)-1H-1,2,3-triazol-5-yl]- (9CI) (CA INDEX NAME)



RN 752233-22-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5-(phenylmethoxy)-2-(4-phenyl-1H-1,2,3-triazol-5-yl)- (9CI) (CA INDEX NAME)



RN 752233-23-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5-hydroxy-2-(4-phenyl-1H-1,2,3-triazol-5-yl)- (9CI) (CA INDEX NAME)

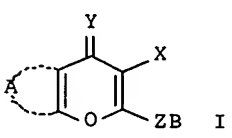


REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 8 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:117904 HCAPLUS Full-text
DOCUMENT NUMBER: 140:171934
TITLE: Heterocyclic fluorescent dyes and organic electroluminescent devices containing them
INVENTOR(S): Sato, Wataru; Nakai, Toshimitsu; Akiyama, Seiji; Yoneyama, Tomio
PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 49 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004043581	A2	20040212	JP 2002-201152	20020710
PRIORITY APPLN. INFO.:			JP 2002-201152	20020710

OTHER SOURCE(S): MARPAT 140:171934
GI

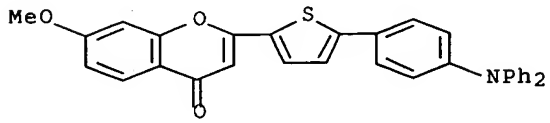


I

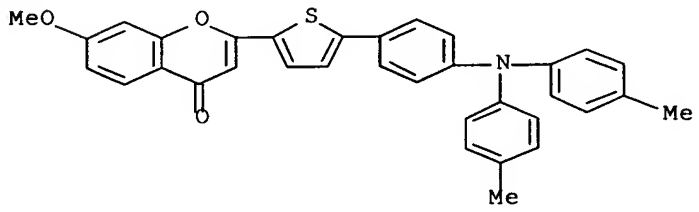
AB The dyes comprise I [A = aromatic hydrocarbyl or heterocyclic group of (un)substituted 6-membered monocycle or condensed ring; Y = O, CR1R2; R1, R2 = H, alkyl, aromatic hydrocarbyl or heterocyclic group of 5- or 6-membered monocycle or condensed ring, alkoxycarbonyl, aryloxycarbonyl, amino, acyl, acylamino, carbamoyl, OH, cyano, aralkyl; R1 and R2 may be substituted; X = H, substituent; Z = aromatic hydrocarbyl or heterocyclic group of (un)substituted 5- or 6-membered monocycle or condensed ring; B = electron-donative group]. In the devices, electron-transporting materials and/or hole-transporting materials as host materials may be doped with I. The devices show high luminescent intensity, low driving voltage, and good stability.

IT 654067-67-1P 654067-68-2P 654067-70-6P
654067-72-8P 654067-74-0P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(heterocyclic fluorescent dyes for electroluminescent devices with high luminescent efficiency)

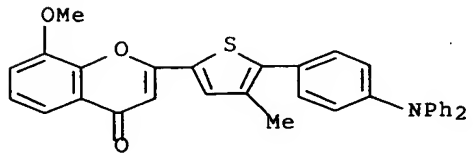
RN 654067-67-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diphenylamino)phenyl]-2-thienyl]-7-methoxy- (9CI) (CA INDEX NAME)



RN 654067-68-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-[4-[bis(4-methylphenyl)amino]phenyl]-2-thienyl]-7-methoxy- (9CI) (CA INDEX NAME)

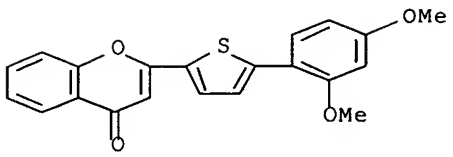


RN 654067-70-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diphenylamino)phenyl]-4-methyl-2-thienyl]-8-methoxy- (9CI) (CA INDEX NAME)

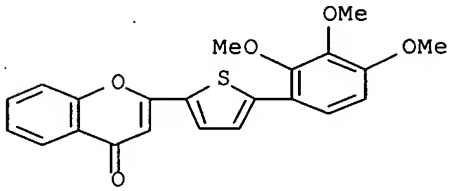


RN 654067-72-8 HCAPLUS

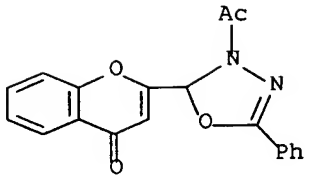
CN 4H-1-Benzopyran-4-one, 2-[5-(2,4-dimethoxyphenyl)-2-thienyl]- (9CI) (CA INDEX NAME)



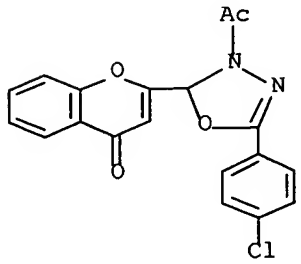
RN 654067-74-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-(2,3,4-trimethoxyphenyl)-2-thienyl]- (9CI) (CA INDEX NAME)



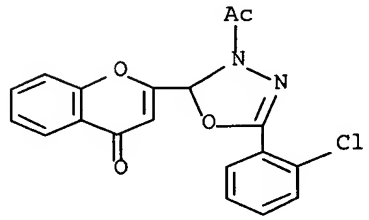
L21 ANSWER 9 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:828582 HCAPLUS Full-text
DOCUMENT NUMBER: 140:270791
TITLE: Synthesis of 2-dihydrooxadiazolinylchromones
AUTHOR(S): Cao, Ling-hua; Cui, Peng-yuan
CORPORATE SOURCE: Department of Chemistry, Xinjiang University, Xinjiang, 830046, Peop. Rep. China
SOURCE: Journal of the Chinese Chemical Society (Taipei, Taiwan) (2003), 50(4), 903-908
CODEN: JCCTAC; ISSN: 0009-4536
PUBLISHER: Chinese Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:270791
AB Reactions of substituted 2-formylchromones with aroylhydrazines gave 2-(aroylhydrazonomethylidene)chromones which were converted to 2-(3-acetyl-5-aryl-2,3-dihydro-1,3,4-oxadiazol-2-yl)chromones by refluxing in Ac2O. All target compds. were characterized through elemental anal. and IR, 1H NMR, MS.
IT 672327-78-5P 672327-79-6P 672327-80-9P
672327-81-0P 672327-82-1P 672327-83-2P
672327-84-3P 672327-85-4P 672327-86-5P
672327-87-6P 672327-88-7P 672327-89-8P
672327-90-1P 672327-91-2P 672327-92-3P
672327-93-4P 672327-94-5P 672327-95-6P
672327-96-7P 672327-97-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of oxadiazolinylchromones)
RN 672327-78-5 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-2-(4-oxo-4H-1-benzopyran-2-yl)-5-phenyl- (9CI) (CA INDEX NAME)



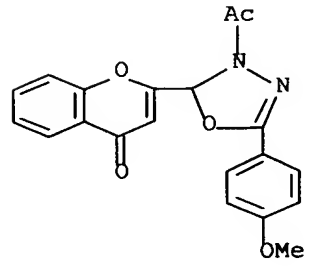
RN 672327-79-6 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-5-(4-chlorophenyl)-2,3-dihydro-2-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



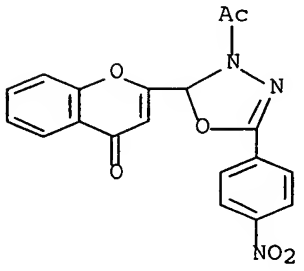
RN 672327-80-9 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-5-(2-chlorophenyl)-2,3-dihydro-2-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



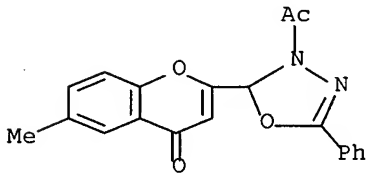
RN 672327-81-0 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-5-(4-methoxyphenyl)-2-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



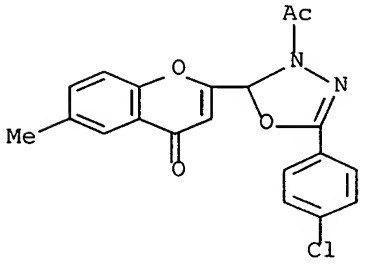
RN 672327-82-1 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-5-(4-nitrophenyl)-2-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



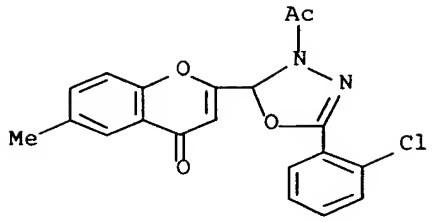
RN 672327-83-2 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)-5-phenyl- (9CI) (CA INDEX NAME)



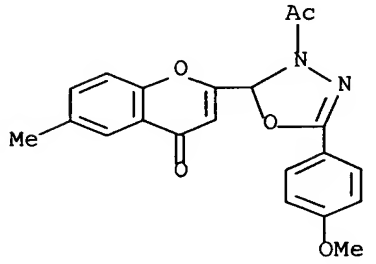
RN 672327-84-3 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-5-(4-chlorophenyl)-2,3-dihydro-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



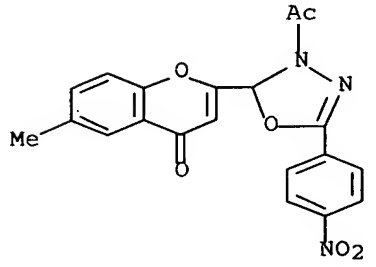
RN 672327-85-4 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-5-(2-chlorophenyl)-2,3-dihydro-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



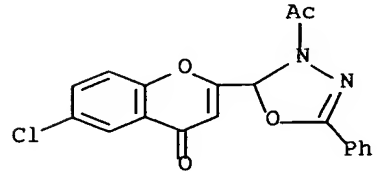
RN 672327-86-5 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-5-(4-methoxyphenyl)-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



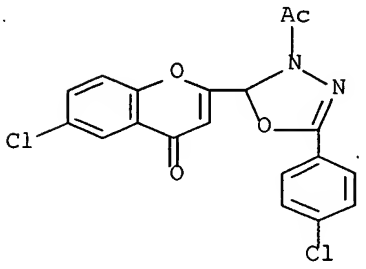
RN 672327-87-6 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2,3-dihydro-2-(6-methyl-4-oxo-4H-1-benzopyran-2-yl)-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



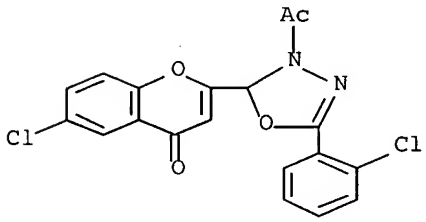
RN 672327-88-7 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-phenyl- (9CI) (CA INDEX NAME)



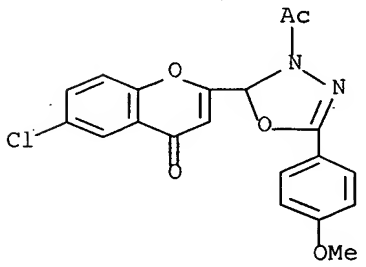
RN 672327-89-8 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-chlorophenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)



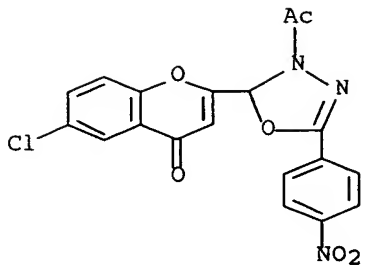
RN 672327-90-1 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(2-chlorophenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)



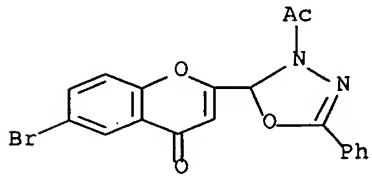
RN 672327-91-2 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



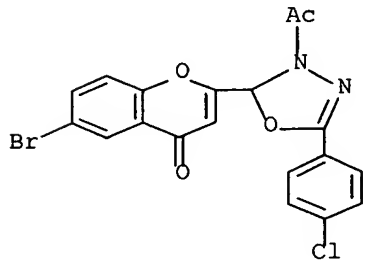
RN 672327-92-3 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



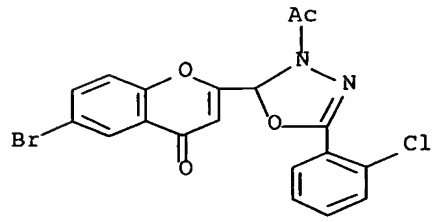
RN 672327-93-4 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-bromo-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-phenyl- (9CI) (CA INDEX NAME)



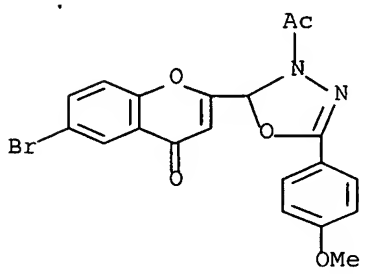
RN 672327-94-5 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-bromo-4-oxo-4H-1-benzopyran-2-yl)-5-(4-chlorophenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)



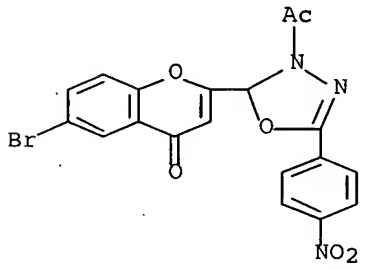
RN 672327-95-6 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-bromo-4-oxo-4H-1-benzopyran-2-yl)-5-(2-chlorophenyl)-2,3-dihydro- (9CI) (CA INDEX NAME)



RN 672327-96-7 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-bromo-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 672327-97-8 HCAPLUS
CN 1,3,4-Oxadiazole, 3-acetyl-2-(6-bromo-4-oxo-4H-1-benzopyran-2-yl)-2,3-dihydro-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:513253 HCAPLUS Full-text
DOCUMENT NUMBER: 139:390750
TITLE: Detection of inhibition of bovine viral diarrhea virus by aromatic cationic molecules
AUTHOR(S): Givens, M. Daniel; Dykstra, Christine C.; Brock, Kenny V.; Stringfellow, David A.; Kumar, Arvind; Stephens, Chad E.; Goker, Hakan; Boykin, David W.
CORPORATE SOURCE: Department of Pathobiology, College of Veterinary Medicine, Auburn University, Auburn, AL, 36849, USA
SOURCE: Antimicrobial Agents and Chemotherapy (2003), 47(7), 2223-2230
CODEN: AMACCQ; ISSN: 0066-4804
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:390750

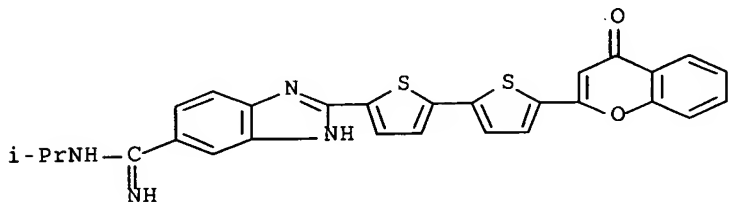
AB Bovine viral diarrhea virus (BVDV) is an economically significant pathogen of cattle and a problematic contaminant in the laboratory BVDV is often used as an in vitro model for hepatitis C virus during drug discovery efforts. Aromatic dicationic mols. have exhibited inhibitory activity against several RNA viruses. Thus, the purpose of this research was to develop and apply a

method for screening the aromatic cationic compds. for in vitro cytotoxicity and activity against a noncytopathic strain of BVDV. The screening method evaluated the concentration of BVDV in medium and cell lysates after 72 h of cell culture in the presence of either a 25 or 5 μM concentration of the test compound Five of 93 screened compds. were selected for further determination of inhibitory (90 and 50%) and cytotoxic (50 and 10%) concentration endpoints. The screening method identified compds. that exhibited inhibition of BVDV at nanomolar concns. while exhibiting no cytotoxicity at 25 μM concns. The leading compds. require further investigation to determine their mechanism of action, in vivo activity, and specific activity against hepatitis C virus.

IT 625459-88-3
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of bovine viral diarrhea virus by aromatic cationic mols.)

RN 625459-88-3 HCAPLUS

CN 1H-Benzimidazole-5-carboximidamide, N-(1-methylethyl)-2-[5'-(4-oxo-4H-1-benzopyran-2-yl)[2,2'-bithiophen]-5-yl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 11 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:414442 HCAPLUS Full-text

DOCUMENT NUMBER: 139:14702

TITLE: Thin-film organic electroluminescent devices containing phosphors bearing chromone frameworks and benzene rings

INVENTOR(S): Sato, Hideki; Sato, Yoshiharu; Endo, Kyoko; Murata, Yukichi

PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

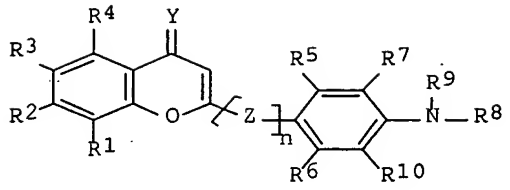
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003157978	A2	20030530	JP 2002-192850	20020702
			JP 2001-272403 A	20010907

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 139:14702

GI



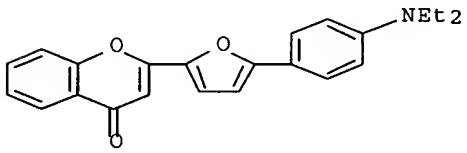
I

AB The organic electroluminescent (EL) devices contain the phosphor compds. represented by general formula I [R1-R4 = H, (substituted) alkyl, (substituted) alkoxy, halo, cyano; R5-R10 = H, (substituted) alkyl; R8 and R9, R7 and R8, or R9 and R10 may be bonded to each other and form ring; Y = O, CR11R12; R11, R12 = CO2R13; R13 = (substituted) alkyl; Z = direct bond, (substituted) thiophene ring, (substituted) furan ring, (substituted) pyrrole ring, (substituted) benzene ring; n = 0, 1]. Preferably, the organic EL devices contain I as dopants in host materials of electron-transporting materials and hole-transporting materials.

IT 533934-92-8P
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(thin-film organic EL devices containing phosphors bearing chromone frameworks
and benzene rings)

RN 533934-92-8 HCAPLUS

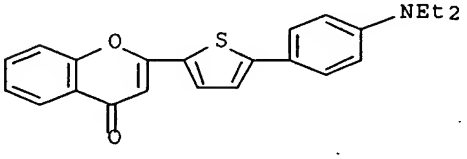
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diethylamino)phenyl]-2-furanyl]- (9CI) (CA INDEX NAME)



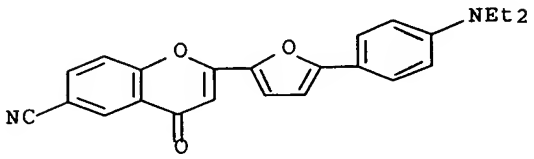
IT 234451-36-6P 533934-94-0P 533934-95-1P
533934-97-3P 533934-99-5P
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(thin-film organic EL devices containing phosphors bearing chromone frameworks
and benzene rings)

RN 234451-36-6 HCAPLUS

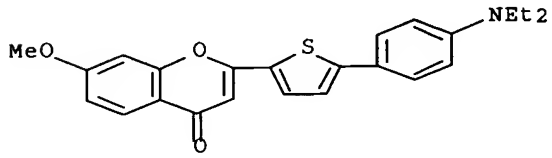
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diethylamino)phenyl]-2-thienyl]- (9CI) (CA INDEX NAME)



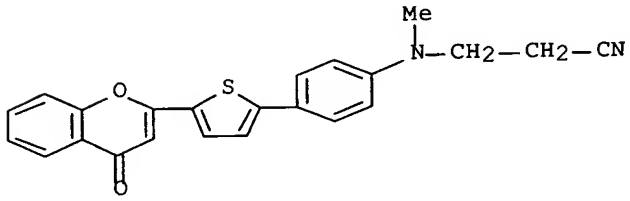
RN 533934-94-0 HCAPLUS
CN 4H-1-Benzopyran-6-carbonitrile, 2-[5-[4-(diethylamino)phenyl]-2-furanyl]-4-oxo- (9CI) (CA INDEX NAME)



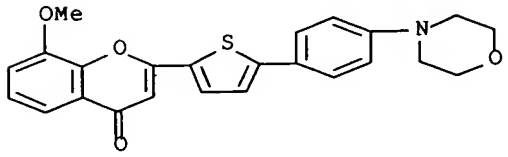
RN 533934-95-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diethylamino)phenyl]-2-thienyl]-7-methoxy- (9CI) (CA INDEX NAME)



RN 533934-97-3 HCAPLUS
CN Propanenitrile, 3-[methyl[4-[5-(4-oxo-4H-1-benzopyran-2-yl)-2-thienyl]phenyl]amino]- (9CI) (CA INDEX NAME)



RN 533934-99-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 8-methoxy-2-[5-[4-(4-morpholinyl)phenyl]-2-thienyl]- (9CI) (CA INDEX NAME)



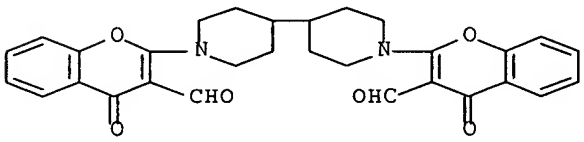
L21 ANSWER 12 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:710229 HCAPLUS Full-text
DOCUMENT NUMBER: 138:187662

TITLE: 2-(N-Methylanilino)-3-formylchromone-a versatile synthon for incorporation of chromone moiety in a variety of heterocyclic systems and macrocycles through reactions with bifunctional nucleophiles
AUTHOR(S): Singh, Gurmit; Singh, Lakhwinder; Ishar, M. P. S.
CORPORATE SOURCE: Department of Pharmaceutical Sciences, Guru Nanak Dev University, Amritsar, 143005, India
SOURCE: Tetrahedron (2002), 58(39), 7883-7890
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 138:187662

AB Reactions of 2-(N-methylanilino)-3-formylchromones with a number of bifunctional nucleophiles, involving substitution of N-methylanilino moiety and/or condensations with 3-formyl function have provided an easy access to a variety of potentially biol. active hetero-annelated chromones, novel macrocycles, and tetradentate ligands having intact chromone moiety.

IT 497932-83-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(utilization of (methylanilino)formylchromones as synthons for chromone moiety in heterocyclic systems and macrocycles)

RN 497932-83-9 HCAPLUS
CN 4H-1-Benzopyran-3-carboxaldehyde, 2,2'-[4,4'-bipiperidine]-1,1'-diylbis[4-oxo- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 13 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:661419 HCAPLUS Full-text
DOCUMENT NUMBER: 135:226823
TITLE: Preparation of flavone derivatives for use as medicines
INVENTOR(S): Haesslein, Jean-luc; Lefrancois, Dominique; Uridat, Eric; Zhang, Jidong
PATENT ASSIGNEE(S): Aventis Pharma S.A., Fr.
SOURCE: PCT Int. Appl., 87 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064673	A1	20010907	WO 2001-FR561	20010227

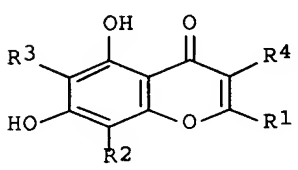
W: AE, AG, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CR, CU, CZ, DM, DZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

FR 2805538	A1	20010831	FR 2000-2528	20000229
FR 2805538	B1	20060804		
CA 2403424	AA	20010907	CA 2001-2403424	20010227
EP 1261603	A1	20021204	EP 2001-909906	20010227
EP 1261603	B1	20060816		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2003525290	T2	20030826	JP 2001-563513	20010227
AU 783663	B2	20051124	AU 2001-37501	20010227
AT 336490	E	20060915	AT 2001-909906	20010227
US 2003119816	A1	20030626	US 2002-181677	20020904
PRIORITY APPLN. INFO.:			FR 2000-2528 A	20000229
			WO 2001-FR561 W	20010227

OTHER SOURCE(S): CASREACT 135:226823; MARPAT 135:226823

GI



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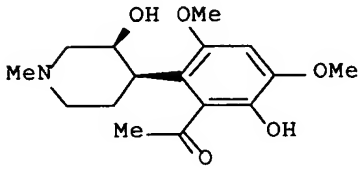


II

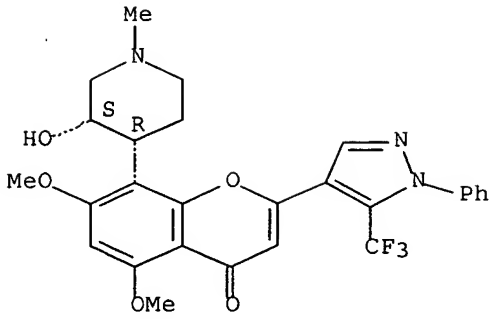
AB The invention concerns novel products I [R1 = mono- or bicyclic (un)substituted (un)saturated carbocycle, heterocycle; R2, R3 one = H and the other = (un)substituted piperidinyl; R4 = H, alkyl, (un)substituted Ph] in all isomeric and salt forms for used as medicinals. Thus, the trifluoracetate of I [R1 = C6H4Cl-2-F-4, R2 = 3-hydroxy-1-methyl-4- piperidinyl-(3S,4R), R3 = R4 = H] was prepared via the condensation of piperidine derivative II with Me 2-chloro-4-fluorobenzoate, cyclization with aqueous HCl, O-demethylation with Reillex pyridine TM 402 hydroiodide and trifluoroacetate salt formation. Pharmaceutical compns. containing I can be used as antimitotics, for cancer chemotherapy, for treatment of psoriasis, as parasiticides or for treatment of Alzheimer's disease.

IT 358739-52-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of flavone derivs. for use as medicines)

RN 358739-52-3 HCAPLUS

CN 4H-1-Benzopyran-4-one, 8-[(3S,4R)-3-hydroxy-1-methyl-4-piperidinyl]-5,7-dimethoxy-2-[1-phenyl-5-(trifluoromethyl)-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

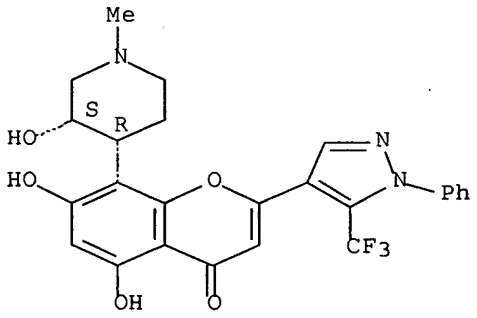


IT 358738-92-8P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of flavone derivs. for use as medicines)
RN 358738-92-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 5,7-dihydroxy-8-[(3S,4R)-3-hydroxy-1-methyl-4-piperidinyl]-2-[1-phenyl-5-(trifluoromethyl)-1H-pyrazol-4-yl]-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

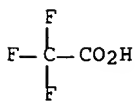
CRN 358738-91-7
CMF C25 H22 F3 N3 O5

Absolute stereochemistry.



CM 2

CRN 76-05-1
CMF C2 H F3 O2



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

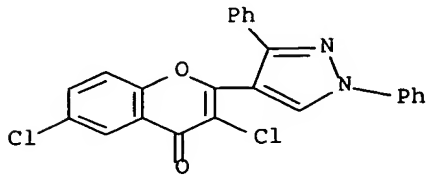
L21 ANSWER 14 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:849476 HCAPLUS Full-text
DOCUMENT NUMBER: 134:147581
TITLE: Synthesis, characterization and antimicrobial activities of some 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-chlorochromones and 2-(1,3-diphenyl-1H-pyrazol-4-yl)-4-(2-hydroxyphenyl)-2,3-dihydro-1,5 benzothiazepines
AUTHOR(S): Karale, B. K.; Chavan, V. P.; Mane, A. S.; Hangarge, R. V.; Gill, C. H.; Shingare, M. S.
CORPORATE SOURCE: Department of chemistry, Dr. B. A. Marathwada University, Aurangabad, 431004, India
SOURCE: Korean Journal of Medicinal Chemistry (2000), 10(2), 84-91
CODEN: KJMCE7; ISSN: 1225-0058
PUBLISHER: Korean Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:147581
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Base catalyzed condensation of 2'-hydroxyacetophenones with 1,3-diphenyl-1H-pyrazole-4-carboxaldehydes gave the pyrazolylpropenones I (R, R1 = H, Me; R2 = Me, Cl, Br; R3 = H, Me), which on oxidative cyclization with DMSO/CuCl2 gave the (diphenyl-1H-pyrazol-4- yl)chlorochromones II. Condensation of I with 2-aminothiophenol gave the (diphenylpyrazolyl)(hydroxyphenyl)dihydrobenzothiazepines III. I-III were characterized by IR, 1H NMR and mass spectroscopy and tested for antimicrobial activity.

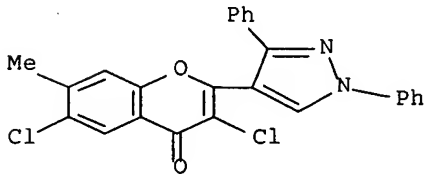
IT 324034-21-1P 324034-22-2P 324034-23-3P
324034-24-4P 324034-25-5P 324034-26-6P
324034-27-7P 324034-28-8P 324034-29-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antimicrobial activities of diphenylpyrazolylchlorochromones, (diphenylpyrazolyl)(hydroxyphenyl)dihydrobenzothiazepines, and [(diphenylpyrazolyl)(hydroxyphenyl)propenones)

RN 324034-21-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)- (9CI) (CA INDEX NAME)

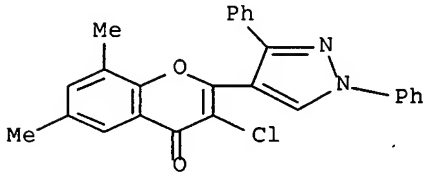


RN 324034-22-2 HCAPLUS

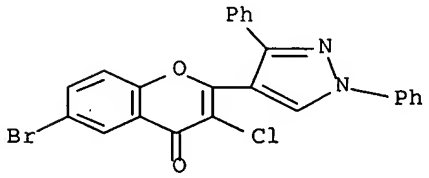
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-7-methyl- (9CI) (CA INDEX NAME)



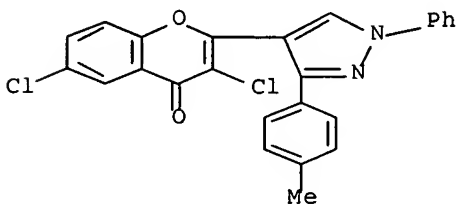
RN 324034-23-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-6,8-dimethyl- (9CI) (CA INDEX NAME)



RN 324034-24-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-3-chloro-2-(1,3-diphenyl-1H-pyrazol-4-yl)-(9CI) (CA INDEX NAME)

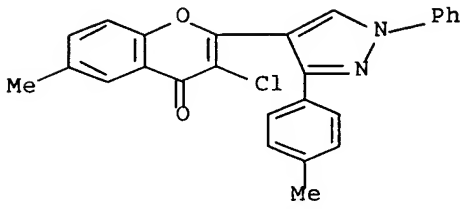


RN 324034-25-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

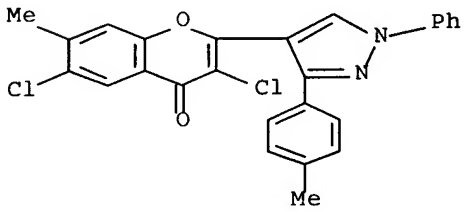


RN 324034-26-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6-methyl-2-[3-(4-methylphenyl)-1-phenyl-1H-

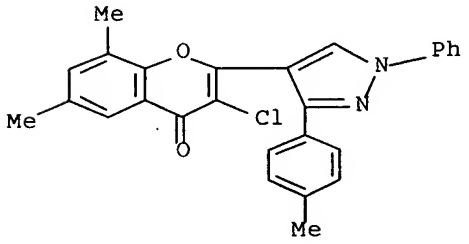
pyrazol-4-yl]- (9CI) (CA INDEX NAME)



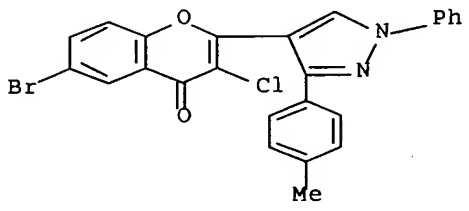
RN 324034-27-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3,6-dichloro-7-methyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 324034-28-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-chloro-6,8-dimethyl-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)



RN 324034-29-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-bromo-3-chloro-2-[3-(4-methylphenyl)-1-phenyl-1H-pyrazol-4-yl]- (9CI) (CA INDEX NAME)

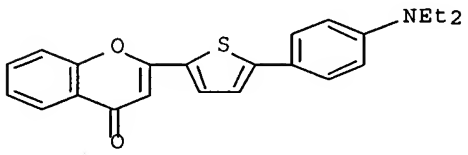


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 15 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:313027 HCAPLUS Full-text
DOCUMENT NUMBER: 131:129869
TITLE: Synthesis and characterization of highly efficient, chemically, and thermally stable chromophores with chromone-containing electron acceptors for NLO applications
AUTHOR(S): Jen, Alex K.-Y.; Liu, Yunqi; Zheng, Lixin; Liu, Sen; Drost, Kevin J.; Zhang, Yue; Dalton, Larry R.
CORPORATE SOURCE: Dep. Chem., Northeastern Univ., Boston, MA, 02115, USA
SOURCE: Advanced Materials (Weinheim, Germany) (1999), 11(6), 452-455
CODEN: ADVMEW; ISSN: 0935-9648
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of chromophores is presented with a Et2N group as donor and a variety of strong electron-withdrawing groups on the chromone moiety. Incorporation of these chromophores into a polyimide gives a material with high E-O coeffs., low optical loss, and good thermal stability.

IT 234451-36-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of chromophores with chromone-containing electron acceptors as nonlinear optical materials)
RN 234451-36-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-[4-(diethylamino)phenyl]-2-thienyl]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 16 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:301222 HCAPLUS Full-text
DOCUMENT NUMBER: 131:19203
TITLE: 2-Glycosylchromene derivatives
AUTHOR(S): Tronchet, Jean M. J.; Zerelli, Sami; Bernardinelli, Gerald
CORPORATE SOURCE: Department of Pharmaceutical Chemistry, Faculty of Sciences, University of Geneva, Geneva, CH-1211, Switz.
SOURCE: Journal of Carbohydrate Chemistry (1999), 18(3), 343-359
CODEN: JCACDM; ISSN: 0732-8303
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

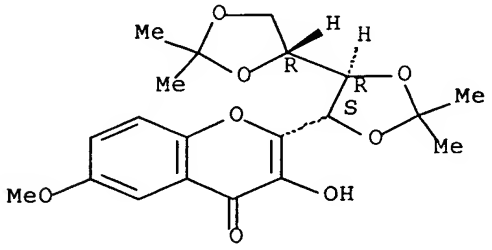
AB Treated with salicylaldehyde or its 5-methoxy derivative, a series of blocked terminal (E)-nitroenoses underwent a condensation reaction leading in fair to good yields to blocked 2-glycosyl-3-nitro-2H-chromene derivs. Treated with cyanide, the nitro derivs. afforded 4-cyano-2-glycosyl-2H-chromenes via an addition-elimination reaction. These two types of chromenes bearing an electron-withdrawing group have been previously shown to have antiviral or cytotoxic properties related to their electrophilicity.

IT 226245-78-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of glycosylchromenes via condensation of salicylaldehyde and addition-elimination reaction)

RN 226245-78-9 HCAPLUS

CN 4H-1-Benzopyran-4-one, 3-hydroxy-6-methoxy-2-[(4R,4'R,5S)-2,2,2',2'-tetramethyl[4,4'-bi-1,3-dioxolan]-5-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 17 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:178260 HCAPLUS Full-text

DOCUMENT NUMBER: 130:311740

TITLE: New syntheses of 4(5)-aryl-5(4)-(2-chromonyl)-1,2,3-triazoles from 2-styrylchromones and sodium azide

AUTHOR(S): Silva, Arthur M. S.; Vieira, Judite S.; Cavaleiro, Jose A. S.; Patonay, Tamas; Livai, Albert; Elguero, Jose

CORPORATE SOURCE: Department of Chemistry, University of Aveiro, Aveiro, 3810, Port.

SOURCE: Heterocycles (1999), 51(3), 481-487
CODEN: HTCYAM; ISSN: 0385-5414

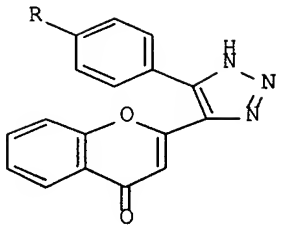
PUBLISHER: Japan Institute of Heterocyclic Chemistry

DOCUMENT TYPE: Journal

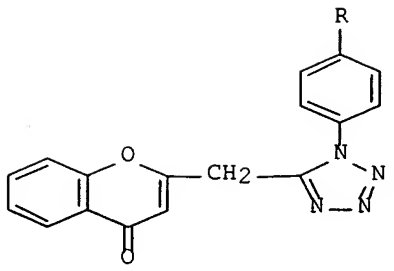
LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:311740

GI



I



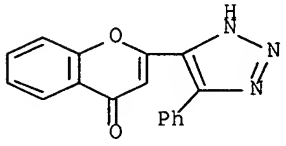
II

AB The reactions of 2-(α-bromostyryl)chromones or 2-styrylchromones with sodium azide afforded 4(5)-aryl-5(4)-(2-chromonyl)-1,2,3-triazoles (I; R = H, Cl, Me, MeO). In the case of 2-(α-bromostyryl)chromones, the unexpected 1-aryl-5-(2-chromonylmethyl)tetrazoles (II; R = H, Cl) have been obtained as minor products and the mechanism of their formation is discussed. The bromination/dehydrobromination reactions of 2-styrylchromones were also studied.

IT 223508-99-4P 223509-01-1P 223509-06-6P
223509-12-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(4(5)-aryl-5(4)-(2-chromonyl)-1,2,3-triazoles from 2-styrylchromones and sodium azide)

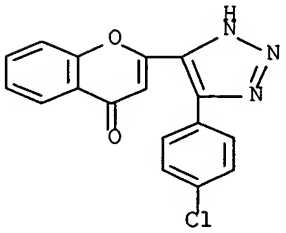
RN 223508-99-4 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-(5-phenyl-1H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



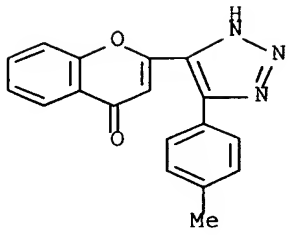
RN 223509-01-1 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[5-(4-chlorophenyl)-1H-1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)

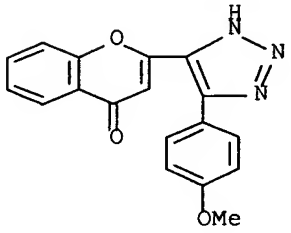


RN 223509-06-6 HCAPLUS

CN 4H-1-Benzopyran-4-one, 2-[5-(4-methylphenyl)-1H-1,2,3-triazol-4-yl]- (9CI) (CA INDEX NAME)



RN 223509-12-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[5-(4-methoxyphenyl)-1H-1,2,3-triazol-4-yl]-
(9CI) (CA INDEX NAME)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

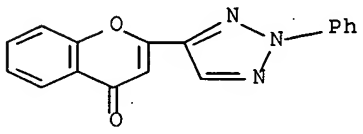
L21 ANSWER 18 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:480285 HCAPLUS Full-text
DOCUMENT NUMBER: 129:161535
TITLE: Synthesis of some new chromones and pyrimidinones containing 2-phenyl-1,2,3-triazole
AUTHOR(S): Liu, Fang-Ming; Yu, Jian-Xin; Wang, Mei; Liu, Yu-Ting; Chen, Yao-Zu
CORPORATE SOURCE: Department of Chemistry, Xinjiang University, Ulumuqi, 830046, Peop. Rep. China
SOURCE: Gaodeng Xuexiao Huaxue Xuebao (1998), 19(7), 1082-1085
CODEN: KTHPDM; ISSN: 0251-0790
PUBLISHER: Gaodeng Jiaoyu Chubanshe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

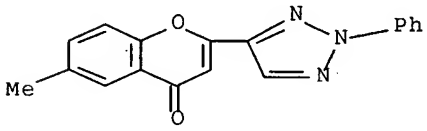
AB Five new 2-heterocyclic-substituted chromones and of ten new related pyrimidinones is prepared Condensation of 2-hydroxy-acetophenones with 2-phenyl-1,2,3-triazole-4-carboxylic acid followed by Baker-Venkataraman rearrangement led to 1,3-diketones (I; R = H, Me, Br, Cl, etc.), which yielded chromones (II) on dehydration and pyrimidinones (III) on condensation with urea and thiourea resp. Their structures were confirmed on the basis of elemental anal., IR, 1H NMR and MS spectral data.

IT 211045-35-1P 211045-36-2P 211045-37-3P
211045-39-5P 211045-40-8P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(synthesis of some new chromones and pyrimidinones containing 2-phenyl-1,2,3-triazole)

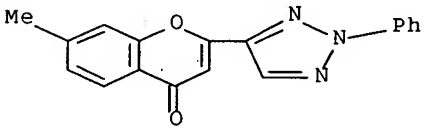
RN 211045-35-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



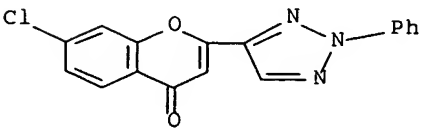
RN 211045-36-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-methyl-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



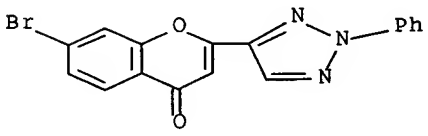
RN 211045-37-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 7-methyl-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



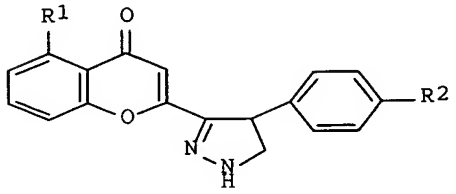
RN 211045-39-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 7-chloro-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



RN 211045-40-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 7-bromo-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



L21 ANSWER 19 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:191408 HCAPLUS Full-text
DOCUMENT NUMBER: 128:257377
TITLE: Synthesis of 4-aryl-3-(2-chromonyl)-2-pyrazolines by the 1,3-dipolar cycloaddition of 2-styrylchromones with diazomethane
AUTHOR(S): Pinto, Diana C. G. A.; Silva, Artur M. S.; Almeida, Lucia M. P. M.; Cavaleiro, Jose A. S.; Levai, Albert; Patonay, Tamas
CORPORATE SOURCE: Dep. of Chemistry, University of Aveiro, Aveiro, 3810, Port.
SOURCE: Journal of Heterocyclic Chemistry (1998), 35(1), 217-224
CODEN: JHTCAD; ISSN: 0022-152X
PUBLISHER: HeteroCorporation
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



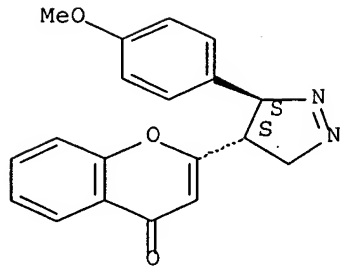
I

AB The firest reported 1,3-dipolar cycloaddn. of 2-styrylchromones with diazomethane afforded 4-aryl-3-(2-chromonyl)-2-pyrazolines (I; R1 = H, R2 = H, Cl, Me, OMe; R1 = OCH2Ph, R2 = H). However, 3-aryl-4-(2-chromonyl)-1-pyrazolines were also found as minor products.

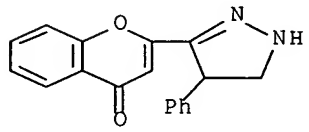
IT 205308-16-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cycloaddn. reaction with diazomethane)

RN 205308-16-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4,5-dihydro-3-(4-methoxyphenyl)-3H-pyrazol-4-yl]-, trans- (9CI) (CA INDEX NAME)

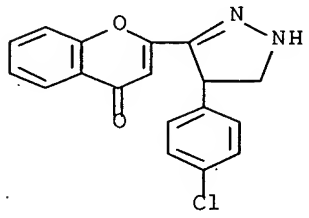
Relative stereochemistry.



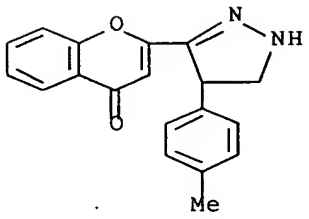
IT 205308-08-3P 205308-09-4P 205308-10-7P
205308-11-8P 205308-12-9P 205308-13-0P
205308-14-1P 205308-15-2P 205308-17-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 205308-08-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4,5-dihydro-4-phenyl-1H-pyrazol-3-yl)- (9CI)
(CA INDEX NAME)



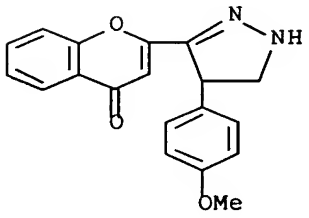
RN 205308-09-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4-(4-chlorophenyl)-4,5-dihydro-1H-pyrazol-3-yl]-
(9CI) (CA INDEX NAME)



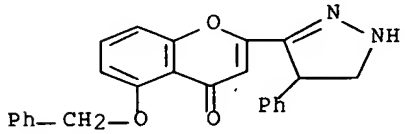
RN 205308-10-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4,5-dihydro-4-(4-methylphenyl)-1H-pyrazol-3-yl]-
(9CI) (CA INDEX NAME)



RN 205308-11-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4,5-dihydro-4-(4-methoxyphenyl)-1H-pyrazol-3-yl]- (9CI) (CA INDEX NAME)

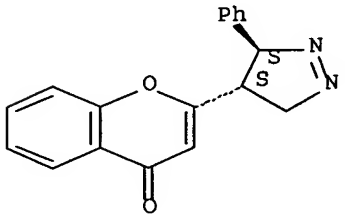


RN 205308-12-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4,5-dihydro-4-phenyl-1H-pyrazol-3-yl)-5-(phenylmethoxy)- (9CI) (CA INDEX NAME)



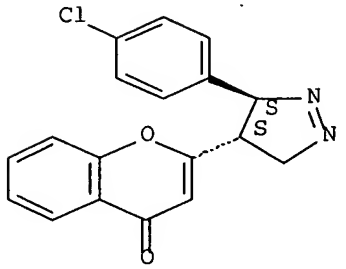
RN 205308-13-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4,5-dihydro-3-phenyl-3H-pyrazol-4-yl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



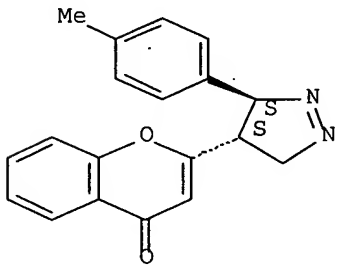
RN 205308-14-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[3-(4-chlorophenyl)-4,5-dihydro-3H-pyrazol-4-yl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



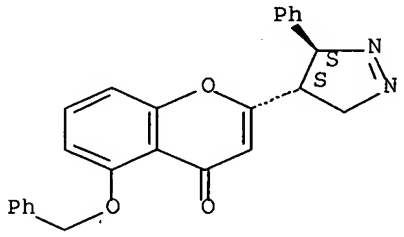
RN 205308-15-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[4,5-dihydro-3-(4-methylphenyl)-3H-pyrazol-4-yl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 205308-17-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(4,5-dihydro-3-phenyl-3H-pyrazol-4-yl)-5-(phenylmethoxy)-, trans- (9CI) (CA INDEX NAME)

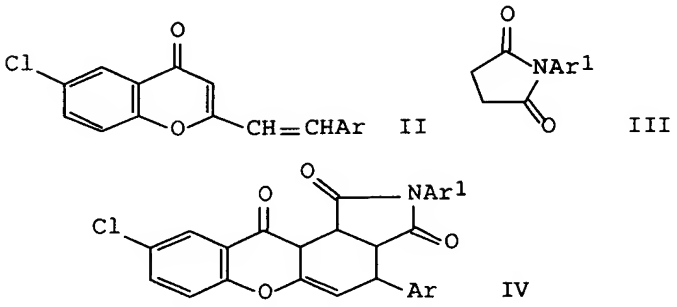
Relative stereochemistry.



REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 20 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:124352 HCAPLUS Full-text
DOCUMENT NUMBER: 118:124352
TITLE: Some reactions of 6-chloro-2-methyl-4H-1-benzopyran-4-one. I
AUTHOR(S): salem, Mounir A. I.; Hamed, Ashiraf A.; El-Shiekeil,

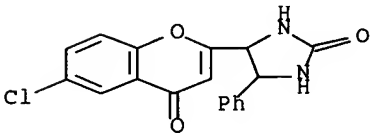
Ali G.; Babaqui, A. S.; Madkour, Hassan M. F.
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt
SOURCE: Revue Roumaine de Chimie (1992), 37(4), 495-508
CODEN: RRCHAX; ISSN: 0035-3930
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



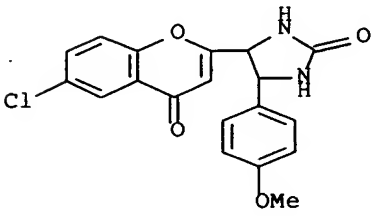
AB The title compound (I) underwent several reactions. Thus, reacting I with ArCHO (Ar = Ph, 4-MeOC6H4, 4-ClC6H4, 4-O2NC6H4, 2-furyl, 3,4-OCH2OC6H3) gave styryl derivs. II. II (Ar = Ph, 4-MeOC6H4, 4-ClC6H4, 4-O2NC6H4) cyclized with N-arylmaleimides III (Ar1 = Ph, 4-MeC6H4, 4-MeOC6H4, 4-O2NC6H4, 4-ClC6H4) to give xanthone derivs. IV. Other reactions of I and its derivs. are examined

IT 133406-25-4P 133406-26-5P 133406-27-6P
133406-28-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

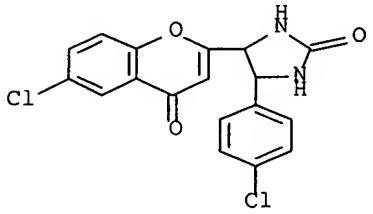
RN 133406-25-4 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-phenyl- (9CI) (CA INDEX NAME)



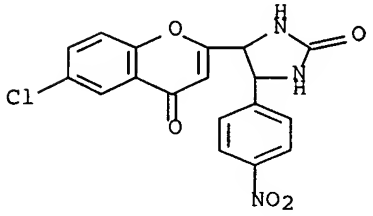
RN 133406-26-5 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



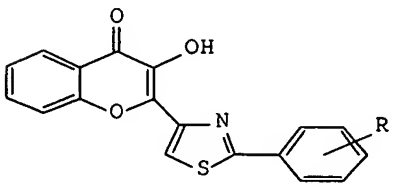
RN 133406-27-6 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-chlorophenyl)- (9CI) (CA INDEX NAME)



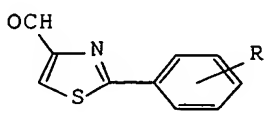
RN 133406-28-7 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



L21 ANSWER 21 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:59264 HCAPLUS Full-text
DOCUMENT NUMBER: 116:59264
TITLE: Heterocycles. LXVII. Synthesis and characterization of some 2-(2-arylthiazol-4-yl)-3-hydroxychromones
AUTHOR(S): Simiti, Ioan; Zaharia, Valentin; Mager, Sorin; Horn, Mihai; Koteles-Popa, Tiberiu
CORPORATE SOURCE: Fac. Pharm., Univ. Med. Pharm., Cluj-Napoca, 3400, Rom.
SOURCE: Archiv der Pharmazie (Weinheim, Germany) (1991), 324(11), 913-15
CODEN: ARPMAS; ISSN: 0365-6233
DOCUMENT TYPE: Journal
LANGUAGE: German
OTHER SOURCE(S): CASREACT 116:59264
GI



I

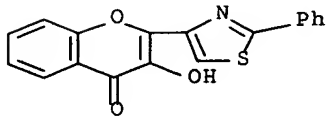


II

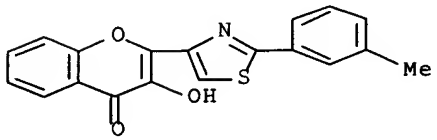
AB Thiazolylchromones I (R = H, 3-Me, 4-Me, 4-Br, 4-EtO) were prepared by treating 2-HOC6H4COMe with aldehydes II, followed by oxidative cyclization of the thiazolylpropenones.

IT 138019-85-9P 138019-86-0P 138019-87-1P
138019-88-2P 138019-89-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and acetylation of)

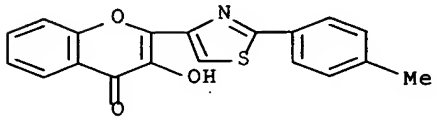
RN 138019-85-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-(2-phenyl-4-thiazolyl)- (9CI) (CA INDEX NAME)



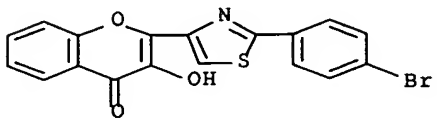
RN 138019-86-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-[2-(3-methylphenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



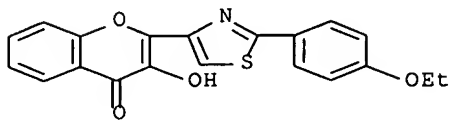
RN 138019-87-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-hydroxy-2-[2-(4-methylphenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



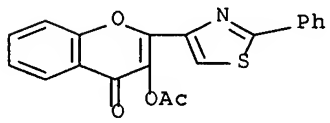
RN 138019-88-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[2-(4-bromophenyl)-4-thiazolyl]-3-hydroxy- (9CI) (CA INDEX NAME)



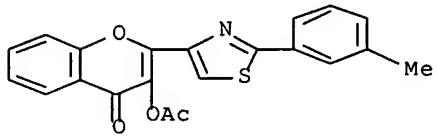
RN 138019-89-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-[2-(4-ethoxyphenyl)-4-thiazolyl]-3-hydroxy- (9CI) (CA INDEX NAME)



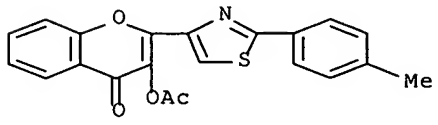
IT 138019-90-6P 138019-91-7P 138019-92-8P
138019-93-9P 138019-94-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 138019-90-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-(2-phenyl-4-thiazolyl)- (9CI) (CA INDEX NAME)



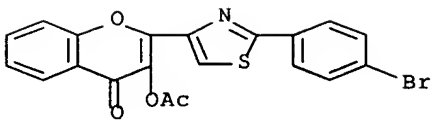
RN 138019-91-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-[2-(3-methylphenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



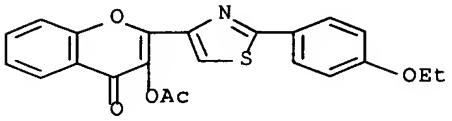
RN 138019-92-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-[2-(4-methylphenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



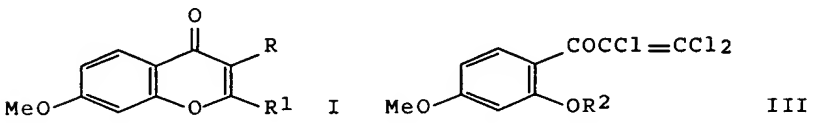
RN 138019-93-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-[2-(4-bromophenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



RN 138019-94-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 3-(acetyloxy)-2-[2-(4-ethoxyphenyl)-4-thiazolyl]- (9CI) (CA INDEX NAME)



L21 ANSWER 22 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:20873 HCAPLUS Full-text
DOCUMENT NUMBER: 116:20873
TITLE: Synthesis of 3-chloro-7-methoxy-2-N-substituted aminochromones and 7-methoxy-2,3-di-N-substituted aminochromones as potential CNS agents
AUTHOR(S): Kapoor, R. P.; Rastogi, M. K.; Garg, C. P.
CORPORATE SOURCE: Dep. Chem., Kurukshetra Univ., Kurukshetra, 132119, India
SOURCE: Indian Journal of Heterocyclic Chemistry (1991), 1(1), 1-7
CODEN: IJCHEI; ISSN: 0971-1627
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

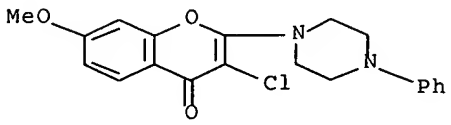


AB Aminochromones I (R = Cl, R1 = NEt2, N-azolyl; R = R1 = N-morpholinyl, -piperidinyl, -pyrrolidinyl) have been synthesized by the action of different amts. of secondary amines on 2,3-dichloro-7-methoxychromone (II). In the preparation of II by a known procedure involving condensation of 1,3-dimethylbenzene with 2,3,3-trichloropropenoyl chloride in the presence of AlCl3, a mixture containing II along with the intermediates III (R2 = H, Me), has been obtained. Compds. I have been screened for CNS and CVS activities, but did not show any marked effect.

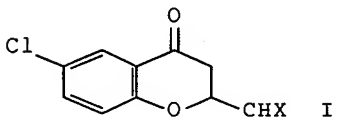
IT 137905-69-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and effect of, on central nervous system)

RN 137905-69-2 HCAPLUS

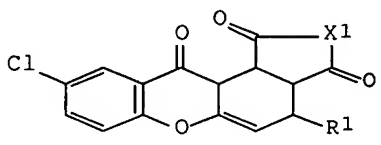
CN 4H-1-Benzopyran-4-one, 3-chloro-7-methoxy-2-(4-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



L21 ANSWER 23 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:185202 HCAPLUS Full-text
DOCUMENT NUMBER: 114:185202
TITLE: Some reactions of 6-chloro-2-methyl-4H-1-benzopyran-4-one. (Part I)
AUTHOR(S): Salem, Mounir A. I.; Hamed, A. A.; El-Shekeil, A. G.; Babaqui, A. S.; Madkour, Hassan M. F.
CORPORATE SOURCE: Fac. Sci., Ain Shams Univ., Cairo, Egypt
SOURCE: Journal of the Chemical Society of Pakistan (1990), 12(3), 189-200
CODEN: JCSPDF; ISSN: 0253-5106
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 114:185202
GI



I



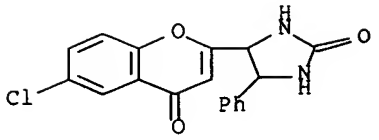
II

AB Condensation of chromone derivative I (X = H2) with RCHO (R = Ph, substituted Ph, 2-furyl) gave styryl derivs. I (X = CHR). Diels-Alder reaction of the latter with maleic anhydride or N-arylmaleimides gave xanthone derivs. II (X1 = O, NR2; R1, R2 = Ph, substituted Ph). Various reactions of I (X = H2, CHR; R = Ph, substituted Ph) and II are also reported.

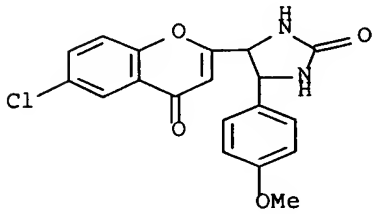
IT 133406-25-4P 133406-26-5P 133406-27-6P
133406-28-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 133406-25-4 HCAPLUS

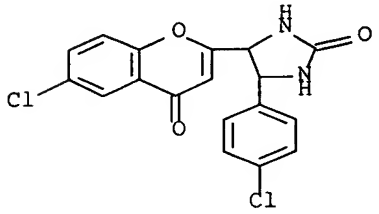
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-phenyl- (9CI) (CA INDEX NAME)



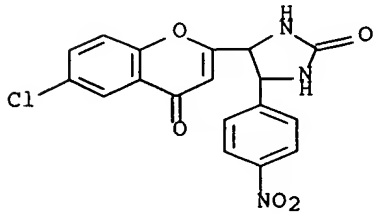
RN 133406-26-5 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)



RN 133406-27-6 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-chlorophenyl)- (9CI) (CA INDEX NAME)



RN 133406-28-7 HCAPLUS
CN 2-Imidazolidinone, 4-(6-chloro-4-oxo-4H-1-benzopyran-2-yl)-5-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



L21 ANSWER 24 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:42797 HCAPLUS Full-text
DOCUMENT NUMBER: 114:42797
TITLE: Preparation of 2-morpholino-1-benzopyran-4-ones and

-1,3-benzoxazin-4-ones as antiatherosclerotic and antithrombotic agents

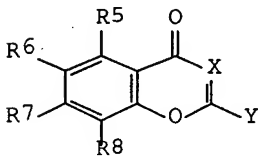
INVENTOR(S): Gammill, Ronald B.; Judge, Thomas M.; Morris, Joel
PATENT ASSIGNEE(S): Upjohn Co., USA
SOURCE: PCT Int. Appl., 111 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9006921	A1	19900628	WO 1989-US5526	19891215
W: AU, DK, FI, HU, JP, KR, NO, SU, US				
RW: AT, BE, CH, DE, ES, FR, GB, IT, LU, NL, SE				
AU 9048071	A1	19900710	AU 1990-48071	19891215
AU 634994	B2	19930311		
EP 459983	A1	19911211	EP 1990-900649	19891215
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
HU 58310	A2	19920228	HU 1990-394	19891215
JP 04502322	T2	19920423	JP 1990-501394	19891215
RU 2118321	C1	19980827	RU 1989-4895676	19891215
CA 2006306	AA	19900621	CA 1989-2006306	19891221
DK 9101187	A	19910619	DK 1991-1187	19910619
NO 9102420	A	19910819	NO 1991-2420	19910620
US 5703075	A	19971230	US 1995-484584	19950607

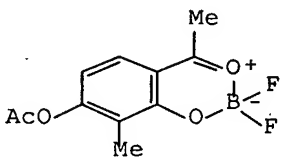
PRIORITY APPLN. INFO.:

US 1988-287796	A2	19881221
WO 1989-US5526	A	19891215
US 1990-541126	B2	19900620
US 1991-718391	B1	19910619
US 1993-106965	B1	19930816
US 1994-292316	B1	19940819

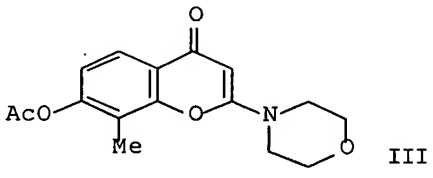
OTHER SOURCE(S): MARPAT 114:42797
GI



I



II



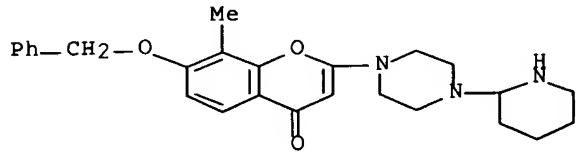
III

AB The title compds. [I; R5-R8 = H, alkyl, allyl, (CH2)qNR9R10, (un)substituted aralkyl, etc.; R9, R10 = H, (pyridyl)alkyl, (un)substituted Ph, phenylalkyl; X = N, CR; R = H, alkyl, NH2, halo; Y = (CH2)nNR9R10; NR9R10 = heterocyclyl; n = 0-5; q = 1-5] were prepared as antiatherosclerotic and antithrombotic agents (no data). Thus, 3,2,4-Me(HO)2C6H2COEt was acetylated and the product stirred

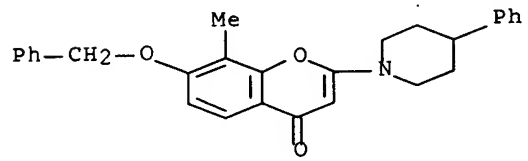
with BF3.Et2O in Et2O to give complex II which was heated 3 h at 60° with R9R10N+:CCl2Cl- (R9R10 = CH2CH2OCH2CH2) in ClCH2CH2Cl to give title compound III.

IT 130735-80-7P 130735-88-5P 130735-89-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antiatherosclerotic and antithrombotic agent)

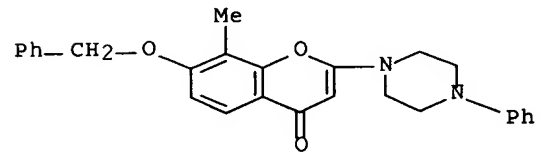
RN 130735-80-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 8-methyl-7-(phenylmethoxy)-2-[4-(2-piperidinyl)-1-piperazinyl]- (9CI) (CA INDEX NAME)



RN 130735-88-5 HCAPLUS
CN 4H-1-Benzopyran-4-one, 8-methyl-7-(phenylmethoxy)-2-(4-phenyl-1-piperidinyl)- (9CI) (CA INDEX NAME)



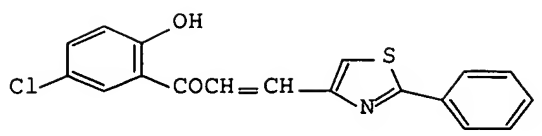
RN 130735-89-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 8-methyl-7-(phenylmethoxy)-2-(4-phenyl-1-piperazinyl)- (9CI) (CA INDEX NAME)



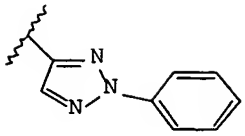
L21 ANSWER 25 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	1990:631006 HCAPLUS Full-text
DOCUMENT NUMBER:	113:231006
TITLE:	Thiazole and triazole analogs of flavanoids
AUTHOR(S):	Litkei, D.; Grishko, L. G.; Khilya, B. P.
CORPORATE SOURCE:	Kiev. Gos. Univ., Kiev, USSR
SOURCE:	Doklady Akademii Nauk Ukrainskoi SSR, Seriya B: Geologicheskie, Khimicheskie i Biologicheskie Nauki (1989), (10), 43-6 CODEN: DNNADO; ISSN: 0201-8454
DOCUMENT TYPE:	Journal
LANGUAGE:	Russian
OTHER SOURCE(S):	CASREACT 113:231006

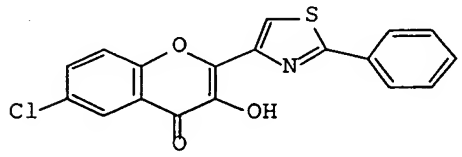
GI



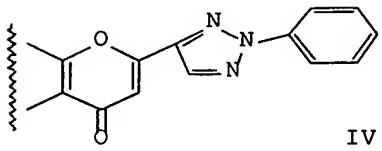
I



II



III

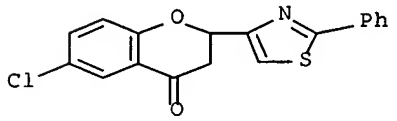


IV

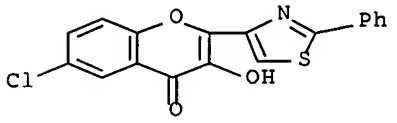
AB Thiazole and triazole analogs of chalcones, e.g. I and II, were synthesized by alkaline condensation of 2-phenyl-4-formylthiazole or 2-phenyl-4-formyltriazole with 5'-chloro-2'-hydroxyacetophenone. Cyclization of I and II gave the corresponding flavones III and IV.

IT 130564-29-3P 130564-30-6P 130564-32-8P
130564-33-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

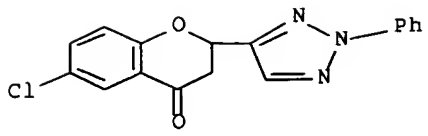
RN 130564-29-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2,3-dihydro-2-(2-phenyl-4-thiazolyl)- (9CI) (CA INDEX NAME)



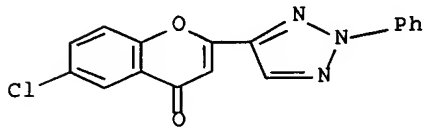
RN 130564-30-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-3-hydroxy-2-(2-phenyl-4-thiazolyl)- (9CI) (CA INDEX NAME)



RN 130564-32-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2,3-dihydro-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



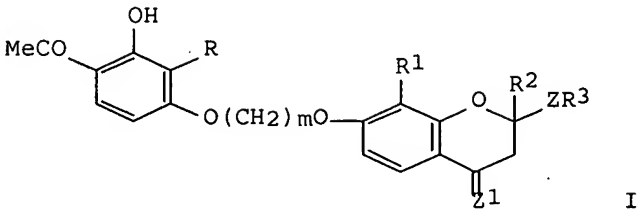
RN 130564-33-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 6-chloro-2-(2-phenyl-2H-1,2,3-triazol-4-yl)- (9CI) (CA INDEX NAME)



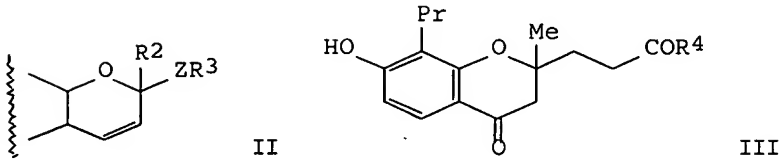
L21 ANSWER 26 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1985:560389 HCAPLUS Full-text
DOCUMENT NUMBER: 103:160389
TITLE: Benzopyran antimetabolites
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 60042378	A2	19850306	JP 1984-14978	19840130
JP 62008432	B4	19870223		
AU 8423157	A1	19850214	AU 1984-23157	19840109
AU 548450	B2	19851212		
ZA 8400345	A	19850227	ZA 1984-345	19840117
EP 139809	A1	19850508	EP 1984-100466	19840118
EP 139809	B1	19880727		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
EP 254329	A1	19880127	EP 1987-112296	19840118
EP 254329	B1	19900926		
R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
CA 1270834	A1	19900626	CA 1984-446171	19840127
US 4778903	A	19881018	US 1984-681038	19841212
US 4665203	A	19870512	US 1985-764697	19850812
JP 62070368	A2	19870331	JP 1986-186103	19860807
JP 02050113	B4	19901101		
US 4952705	A	19900828	US 1987-13807	19870212
US 4888356	A	19891219	US 1988-206624	19880614
PRIORITY APPLN. INFO.:			US 1983-520973 A	19830808
			US 1983-560355 A	19831212
			EP 1984-100466 P	19840118
			US 1984-681038 A1	19841212
			US 1985-764697 A3	19850812

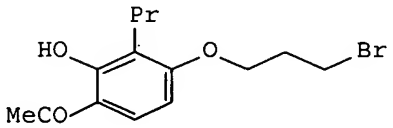
OTHER SOURCE(S): CASREACT 103:160389; MARPAT 103:160389
GI



I



II III

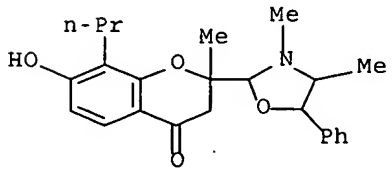


V

AB Benzopyrans I and II (R, R1 = alkyl; R2 = alkyl, carboxyl, alkoxycarbonylalkyl; R3 = H, carboxyl, alkoxycarbonyl, aminocarbonyl, OH; Z = alkylene, alkenylene, etc.; Z1 = O; H2; H, OH; m = 2-6), useful as leukotriene D4 inhibitors, were prepared Thus, refluxing 2,4-dihydroxy-3-propylacetophenone with Et levulinate and pyrrolidine in PhMe gave benzopyranes III [R4 = EtO (IV), pyrrolidino]. Stirring IV with bromide V and K2CO3 in DMF gave I (R = R1 = Pr, R2 = Me, R3 = EtO, Z = CH2CH2, Z1 = O, m = 3).

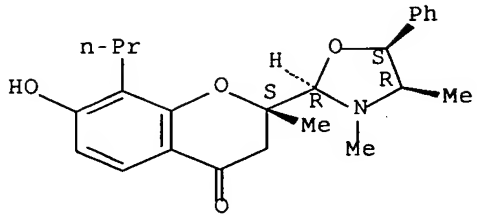
IT 98193-48-7P 98244-58-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 98193-48-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethyl-5-phenyl-2-oxazolidinyl)-2,3-dihydro-7-hydroxy-2-methyl-8-propyl-, [2S-[2α(S*),4aα,5α]]- (9CI) (CA INDEX NAME)



RN 98244-58-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(3,4-dimethyl-5-phenyl-2-oxazolidinyl)-2,3-dihydro-7-hydroxy-2-methyl-8-propyl-, [2R-[2α(S*),4α,5α]]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L21 ANSWER 27 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1985:166514 HCAPLUS Full-text
Correction of: 1983:487873

DOCUMENT NUMBER: 102:166514
Correction of: 99:87873

TITLE: Phototransformations of some 2-substituted 4H-chromen-4-ones (4-chromones) related to the antitumor antibiotic hedamycin

AUTHOR(S): Fredenhagen, Andreas; Sequin, Urs

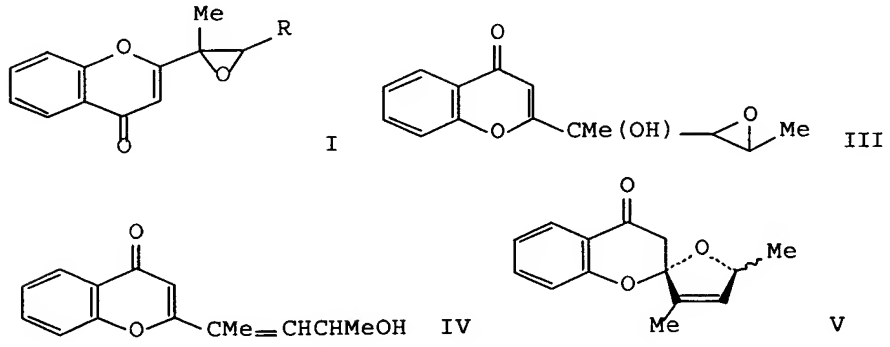
CORPORATE SOURCE: Inst. Org. Chem., Univ. Basel, Basel, CH-4056, Switz.

SOURCE: Helvetica Chimica Acta (1983), 66(2), 586-601
CODEN: HCACAV; ISSN: 0018-019X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

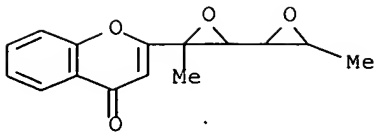


AB Chromones I [R = Me, 3-methyl-2-oxiranyl (II)] were photolyzed as model compds. for hedamycin. The products were isolated and the structures determined by NMR. II gave the alcs. III in O-dependent reaction. It also gave 2-ethylchromone, the allylic alc. IV, and the spiro compound V.

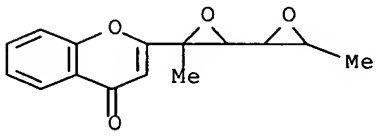
IT 86707-76-8 86707-78-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(photolysis of)

RN 86707-76-8 HCAPLUS

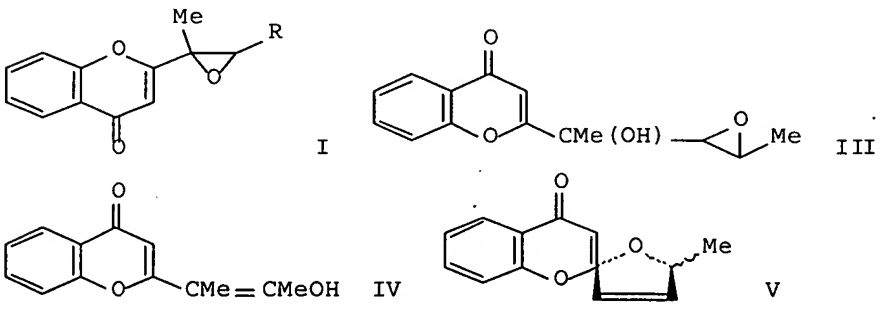
CN Glucitol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



RN 86707-78-0 HCAPLUS
CN Altritol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-
(9CI) (CA INDEX NAME)

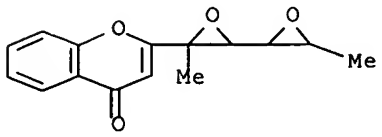


L21 ANSWER 28 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1983:487873 HCAPLUS Full-text
DOCUMENT NUMBER: 99:87873
TITLE: Phototransformations of some 2-substituted 4H-chromen-4-ones (4-chromones) related to the antitumor antibiotic hedamycin
AUTHOR(S): Fredenhagen, Andreas; Sequin, Urs
CORPORATE SOURCE: Inst. Org. Chem., Univ. Basel, Basel, CH-4056, Switz.
SOURCE: Helvetica Chimica Acta (1983), 66(2), 586-601
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

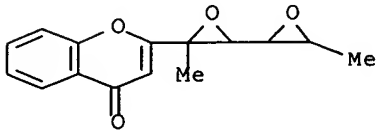


AB Chromones I [R = Me, 3-methyl-2-oxiranyl (II)] were photolyzed as model compds. for hedamycin. The products were isolated and the structures determined by NMR. II gave the alcs. III in O-dependent reaction. It also gave 2-ethylchromone, the allylic alc. IV, and the spiro compound V.
IT 86707-76-8 86707-78-0
RL: RCT (Reactant); RACT (Reactant or reagent)

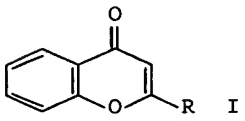
(photolysis of)
RN 86707-76-8 HCAPLUS
CN Glucitol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)



RN 86707-78-0 HCAPLUS
CN Altritol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)

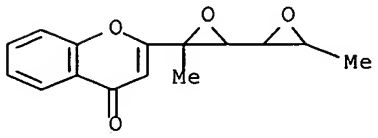


L21 ANSWER 29 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:103506 HCAPLUS Full-text
DOCUMENT NUMBER: 96:103506
TITLE: Carbon-13 NMR spectral differences between corresponding methyl esters, phenyl esters and 2-substituted chromones
AUTHOR(S): Sequin, Urs
CORPORATE SOURCE: Inst. Org. Chem., Univ. Basel, Basel, CH-4056, Switz.
SOURCE: Helvetica Chimica Acta (1981), 64(8), 2654-64
CODEN: HCACAV; ISSN: 0018-019X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

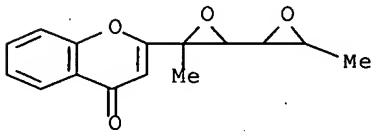


AB The 13C-NMR of chromones (I; R = H, Me, Ph, etc.) are compared with data for the analogous Me and Ph esters, MeO2CR and PhO2CR (R as above). The chemical shift differences found are most prominent for the C atoms β to the ester carbonyl and chromone C(2), resp. These shift differences are discussed in terms of conformational differences between esters MeO2CR and PhO2CR and the analogous I.

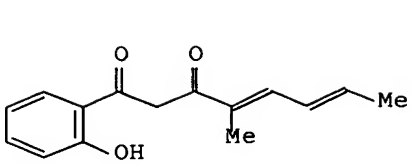
IT 86707-76-8 86707-78-0
RL: PRP (Properties)
(carbon-13 NMR of)
RN 86707-76-8 HCAPLUS
CN Glucitol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)



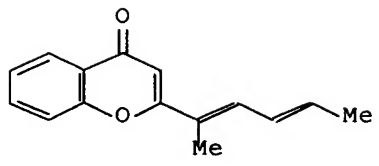
RN 86707-78-0 HCAPLUS
CN Altritol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)



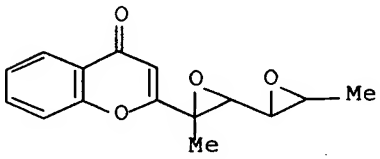
L21 ANSWER 30 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1982:51502 HCAPLUS Full-text
DOCUMENT NUMBER: 96:51502
TITLE: Solid state conformation of a bioxirane related to hedamycin
AUTHOR(S): Fredenhagen, Andreas; Ritter, Walter; Sequin, Urs; Zehnder, Margareta
CORPORATE SOURCE: Inst. Org. Chem., Univ. Basel, Basel, Switz.
SOURCE: Chimia (1981), 35(9), 334-6
CODEN: CHIMAD; ISSN: 0009-4293
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



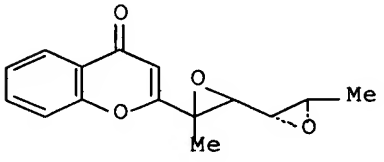
I



II



III



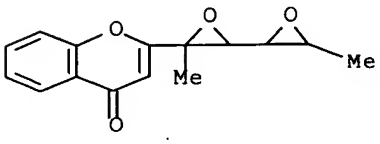
IV

AB Condensation of o-HOC6H4COMe with E,E-MeCH:CHCH:CMeCO2Me gave the β-diketone I, which on treatment with concentrate HCl cyclized to the chromone II. II was epoxidized with m-ClC6H4CO2OH in refluxing CH2Cl2 to yield the threo- and erythro-bioxiranes III and IV, resp. The crystal structure of IV reveals that the solid-state conformation of the C skeleton is very close to that of the related threo-bioxirane moiety in the antibiotic hedamycin.

IT 86707-78-0P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation and crystal and mol. structure of)

RN 86707-78-0 HCAPLUS

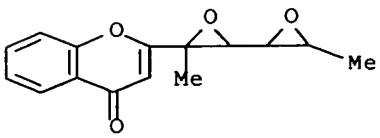
CN Altritol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)



IT 86707-76-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 86707-76-8 HCAPLUS

CN Glucitol, 2,3:4,5-dianhydro-1,6-dideoxy-5-C-(4-oxo-4H-1-benzopyran-2-yl)-(9CI) (CA INDEX NAME)



L21 ANSWER 31 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1978:22533 HCAPLUS Full-text

DOCUMENT NUMBER: 88:22533

TITLE: Reactions of formylchromone derivatives. Part 1.

Cycloadditions to 2- and 3-(aryliminomethyl)chromones

AUTHOR(S): Fitton, Alan O.; Frost, Jonathan R.; Houghton, Peter G.; Suschitzky, Hans

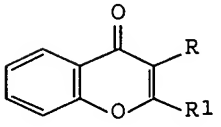
CORPORATE SOURCE: Dep. Chem. Appl. Chem., Univ. Salford, Salford, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1977), (12), 1450-2
CODEN: JCPRB4; ISSN: 0300-922X

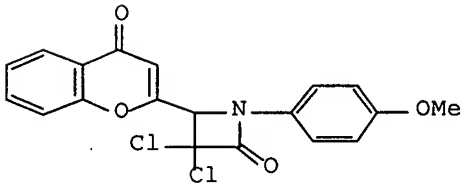
DOCUMENT TYPE: Journal

LANGUAGE: English

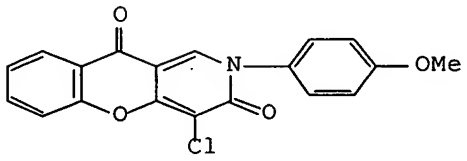
GI



I



II



III

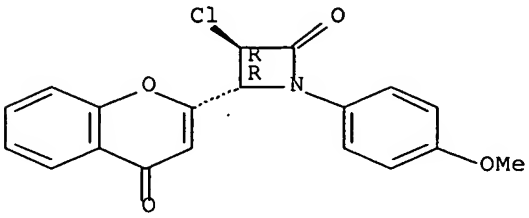
AB 2-(Aryliminomethyl)chromones with mono- and dichloroketene gave (oxochromenyl)azetidinones whereas 3-(aryliminomethyl)chromones with dichloro- and phenylchloroketene gave benzopyrano[3,2-c]pyridinediones. E.g., I (R = H, R1 = CH:NC6H4OMe-4; R = CH:NC6H4OMe-4, R1 = H) with dichloroketene gave 93% II and 74% III, resp.

IT 65160-36-3P 65160-37-4P 65160-38-5P
65160-39-6P 65160-40-9P 65160-41-0P
65160-42-1P 65160-43-2P 65160-44-3P
65160-45-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 65160-36-3 HCAPLUS

CN 2-Azetidinone, 3-chloro-1-(4-methoxyphenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)-, trans- (9CI) (CA INDEX NAME)

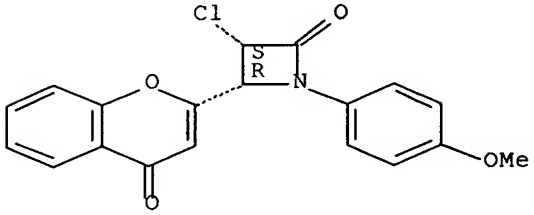
Relative stereochemistry.



RN 65160-37-4 HCAPLUS

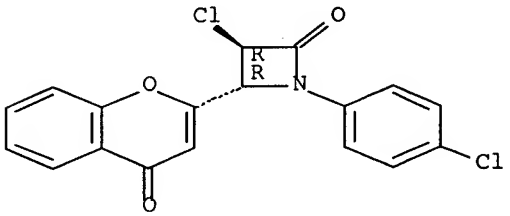
CN 2-Azetidinone, 3-chloro-1-(4-methoxyphenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



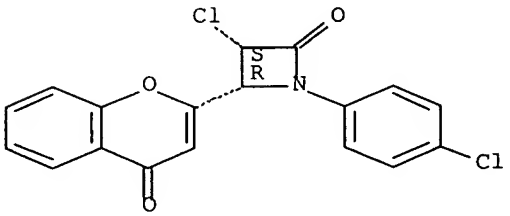
RN 65160-38-5 HCAPLUS
CN 2-Azetidinone, 3-chloro-1-(4-chlorophenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

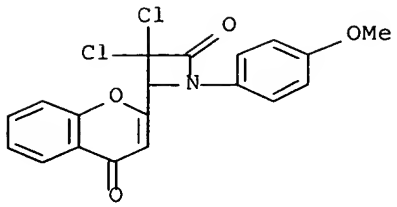


RN 65160-39-6 HCAPLUS
CN 2-Azetidinone, 3-chloro-1-(4-chlorophenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)-, cis- (9CI) (CA INDEX NAME)

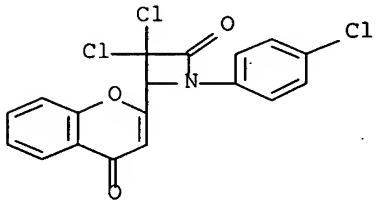
Relative stereochemistry.



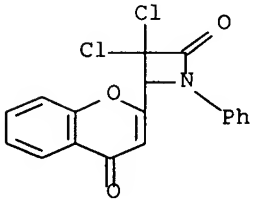
RN 65160-40-9 HCAPLUS
CN 2-Azetidinone, 3,3-dichloro-1-(4-methoxyphenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



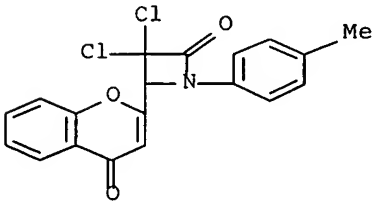
RN 65160-41-0 HCAPLUS
CN 2-Azetidinone, 3,3-dichloro-1-(4-chlorophenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



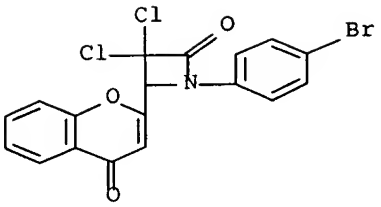
RN 65160-42-1 HCAPLUS
CN 2-Azetidinone, 3,3-dichloro-4-(4-oxo-4H-1-benzopyran-2-yl)-1-phenyl- (9CI) (CA INDEX NAME)



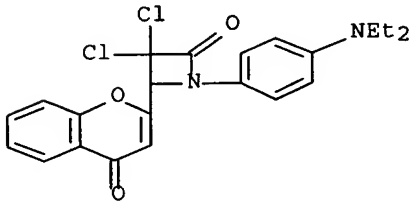
RN 65160-43-2 HCAPLUS
CN 2-Azetidinone, 3,3-dichloro-1-(4-methylphenyl)-4-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



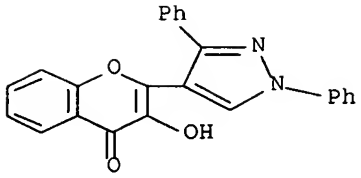
RN 65160-44-3 HCAPLUS
CN 2-Azetidinone, 1-(4-bromophenyl)-3,3-dichloro-4-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



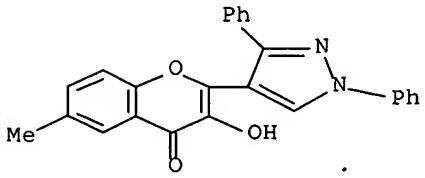
RN 65160-45-4 HCAPLUS
CN 2-Azetidinone, 3,3-dichloro-1-[4-(diethylamino)phenyl]-4-(4-oxo-4H-1-benzopyran-2-yl)- (9CI) (CA INDEX NAME)



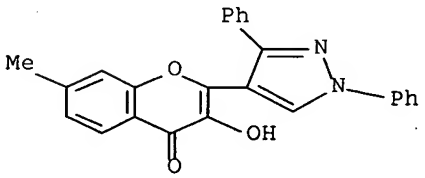
L21 ANSWER 32 OF 32 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1975:514280 HCAPLUS Full-text
DOCUMENT NUMBER: 83:114280
TITLE: Search for physiologically active compounds. XXVII. Synthesis of 2-(1,3-diphenylpyrazol-4-yl)-3-methoxychromones
AUTHOR(S): Reddy, K. R. S.; Srimannarayana, G.; Rao, N. V. Subba
CORPORATE SOURCE: Coll. Sci., Osmania Univ., Hyderabad, India
SOURCE: Proceedings - Indian Academy of Sciences, Section A (1975), 81(5), 197-203
CODEN: PISAA7; ISSN: 0370-0089
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB Condensation of 1,3-diphenylpyrazole-4-carboxaldehyde with the acetophenones I (R-R2 = H; R = R1 = H, R2 = Me; R = R2 = H, R1 = Me; R = Me, R1 = R2 = H; R = R2 = H, R1 = MeO) gave the pyrazoles II, which were cyclized in EtOH-pyridine containing NaOH and H2O2 and then O-methylated to give the title compds. III. III (R-R2 = H) was an effective bactericide against Bacillus subtilis at 20 ppm.
IT 56642-61-6P 56642-62-7P 56642-63-8P
56642-64-9P 56642-65-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and O-methylation of)
RN 56642-61-6 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-hydroxy- (9CI) (CA INDEX NAME)



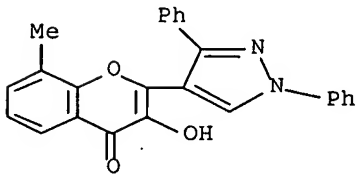
RN 56642-62-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-hydroxy-6-methyl- (9CI) (CA INDEX NAME)



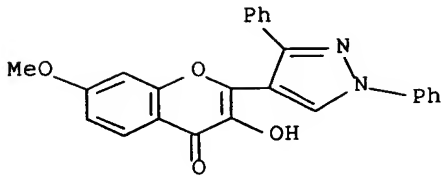
RN 56642-63-8 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-hydroxy-7-methyl- (9CI) (CA INDEX NAME)



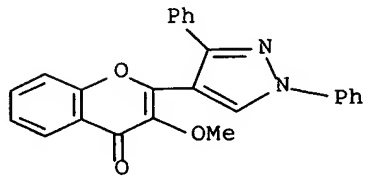
RN 56642-64-9 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-hydroxy-8-methyl- (9CI) (CA INDEX NAME)



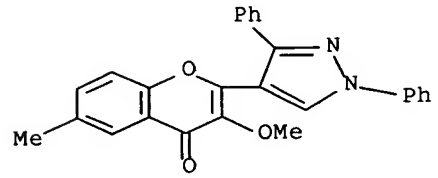
RN 56642-65-0 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-hydroxy-7-methoxy- (9CI) (CA INDEX NAME)



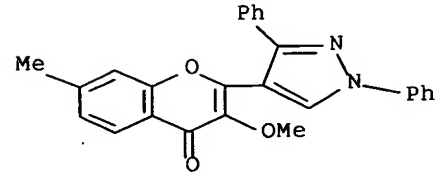
IT 56642-66-1P 56642-67-2P 56642-68-3P
56642-69-4P 56642-70-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 56642-66-1 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-methoxy- (9CI)
(CA INDEX NAME)



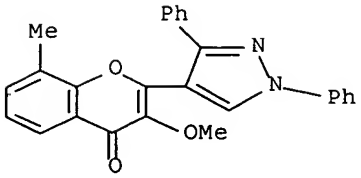
RN 56642-67-2 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-methoxy-6-methyl-
(9CI) (CA INDEX NAME)



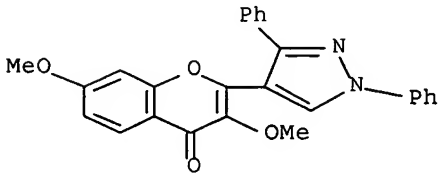
RN 56642-68-3 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-methoxy-7-methyl-
(9CI) (CA INDEX NAME)



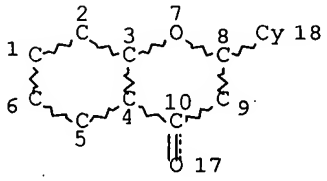
RN 56642-69-4 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3-methoxy-8-methyl-
(9CI) (CA INDEX NAME)



RN 56642-70-7 HCAPLUS
CN 4H-1-Benzopyran-4-one, 2-(1,3-diphenyl-1H-pyrazol-4-yl)-3,7-dimethoxy-
(9CI) (CA INDEX NAME)



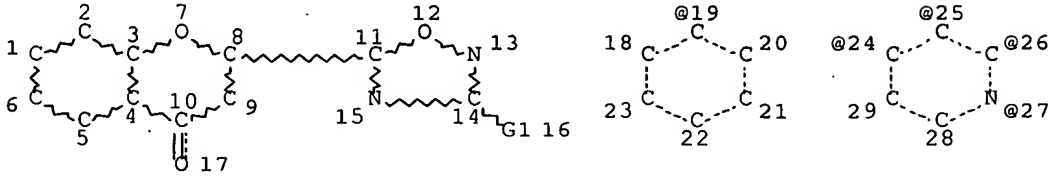
=> => d stat que l34
L5 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 12

STEREO ATTRIBUTES: NONE
L7 50151 SEA FILE=REGISTRY SSS FUL L5
L8 STR



VAR G1=19/24/25/26/27
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE
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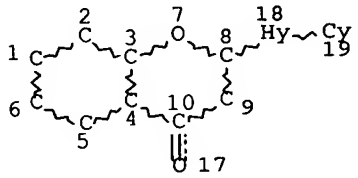
L10 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L9
L18 STR



NODE ATTRIBUTES:
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GGCAT IS MCY AT 19
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 8
NUMBER OF NODES IS 13

STEREO ATTRIBUTES: NONE
L19 180 SEA FILE=REGISTRY SUB=L7 SSS FUL L18
L20 33 SEA FILE=HCAPLUS ABB=ON PLU=ON L19
L21 32 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 NOT L10
L22 1 SEA FILE=HCAPLUS ABB=ON PLU=ON "MUJICA TERESA"/AU
L23 5 SEA FILE=HCAPLUS ABB=ON PLU=ON "MUJICA FERNAUD TERESA"/AU
L24 1 SEA FILE=HCAPLUS ABB=ON PLU=ON "FERNAUD M TERESA MUJICA"/AU
L25 148 SEA FILE=HCAPLUS ABB=ON PLU=ON ("BUCHHOLZ H"/AU OR "BUCHHOLZ H G"/AU OR "BUCHHOLZ H V"/AU OR "BUCHHOLZ H W"/AU) OR ("BUCHHOLZ HERWIG"/AU OR "BUCHHOLZ HERWIG A"/AU OR "BUCHHOLZ HERWING"/AU)
L26 37 SEA FILE=HCAPLUS ABB=ON PLU=ON "CAROLA C"/AU OR "CAROLA CHRISTOPHE"/AU
L27 48 SEA FILE=HCAPLUS ABB=ON PLU=ON "RAUTENBERG W"/AU OR "RAUTENBERG WILFRIED"/AU
L28 32 SEA FILE=HCAPLUS ABB=ON PLU=ON "SIRRENBERG CHRISTIAN"/AU
L29 2 SEA FILE=HCAPLUS ABB=ON PLU=ON (L22 OR L23 OR L24) AND L25 AND L26 AND L27 AND L28
L30 6 SEA FILE=HCAPLUS ABB=ON PLU=ON (L22 OR L23 OR L24) AND (L25 OR L26 OR L27 OR L28)
L31 22 SEA FILE=HCAPLUS ABB=ON PLU=ON L25 AND (L26 OR L27 OR L28)
L32 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND (L27 OR L28)
L33 2 SEA FILE=HCAPLUS ABB=ON PLU=ON L26 AND L28
L34 21 SEA FILE=HCAPLUS ABB=ON PLU=ON (L29 OR L30 OR L31 OR L32 OR L33) NOT (L10 OR L21)

=> d ibib abs hitstr l34 1-21

L34 ANSWER 1 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:1279232 HCAPLUS Full-text
TITLE: Use of chromone derivatives
INVENTOR(S): Mujica-Fernaud, Teresa; Carola, Christophe; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 45pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

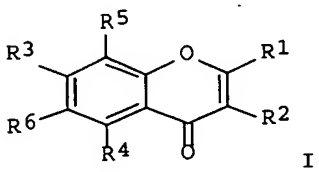
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006128562	A1	20061207	WO 2006-EP4427	20060511
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102005025801	A1	20061207	DE 2005-102005025801	20050602
PRIORITY APPLN. INFO.:			DE 2005-102005025801A	20050602

AB The invention provides for the use of chromone derivs. of the formula (I) or their physiol. unobjectionable salts, or a preparation comprising at least one compound of the formula (I) in which R 1, R2 and R3 are -H, -OH, -OA, -A, -OCOA R 1 and R2 together can be -methylenedioxy or -ethylenedioxy, R1, R2 and R3 are identical or different with the proviso that they cannot all together be -H, R4 is -H, -A, -COOH, -COOA, -COA, -CONH2, -CONHA X is -OH, -CH2-R4, -NH-R4 A is alkyl or R-substituted alky radical, benzyl or R-substituted benzyl radical, Ph or R-substituted Ph radical for the prophylaxis, improvement in general skin condition and/or treatment of skin diseases, especially hyperpigmentation, and also correspondingly new compds.

L34 ANSWER 2 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:945641 HCAPLUS Full-text
DOCUMENT NUMBER: 145:314817
TITLE: Preparation of chromen-4-ones as cometic sunscreens
INVENTOR(S): Carola, Christophe; Walenzyk, Thomas; Rosskopf, Ralf; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: PCT Int. Appl., 97pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 2006094601 A1 20060914 WO 2006-EP1282 20060213
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
DE 102005011534 A1 20060921 DE 2005-102005011534 20050310
DE 2005-102005011534A 20050310
PRIORITY APPLN. INFO.:
OTHER SOURCE(S): MARPAT 145:314817
GI



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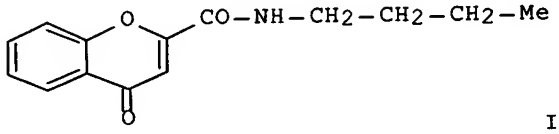


II

AB Title compds. I [R1, R2 = H, CONR7R8; R3, R4, R5, R6 = H, OH, alkyl, etc.; R7 = H, alkyl; R8 = alkyl, etc.] were prepared For example, N-acylation of n-butylamine with Et chromone-2-carboxylate afforded claimed chromenone II in 86% yield. Compds. I are claimed useful for the reduction or prevention of the damaging effects of UV radiation on skin and hair.
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 3 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:510450 HCAPLUS Full-text
DOCUMENT NUMBER: 145:7923
TITLE: Preparation of flavonoid cyclodextrin complexes as antioxidants
INVENTOR(S): Carola, Christophe; Toullec, Anne; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006056308	A2	20060601	WO 2005-EP11830	20051104

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,

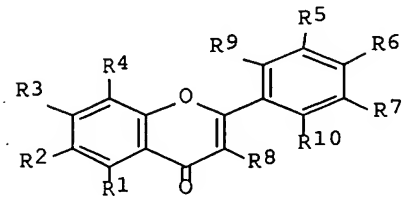
MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2004-102004056899A 20041125

OTHER SOURCE(S): MARPAT 145:7923

GI



I

AB The invention relates to compds. [I]o[CD]p [R1 to R10 = H, OR11, straight-chain or branched C1-20-alkyl, C1-20-hydroxyalkyl, C3-20-alkenyl, C3-10-cycloalkyl, C-12-cycloalkenyl; the rings each also being able to be bridged by (CH2)n; n = 1 to 3; OR11 = OH, branched or linear C1-20-alkoxy, C3-20-alkenyloxy, C1-20-hydroxyalkoxy, C3-10-cycloalkyloxy, and/or C3-12-cycloalkenyloxy; the rings each also being able to be bridged by (CH2)n groups with n = 1 to 3, and/or represent mono- and/or oligoglycosyl radicals; CD representing a cyclodextrin mol.; o = 1; p = 0.5 to 50, with the provision that at least 2 radicals from R1 to R7 = OH and that at least one pair of adjacent groups OH exists in the mol.]. Thus, 7,8-dihydroxyflavone was complexed with 2-hydroxypropyl-β- cyclodextrin in MeOH. Formulations containing I can be used as antioxidants in cosmetics, dermatol. and foodstuffs or feedstuffs. Formulation examples of emulsions and gels containing I are given.

L34 ANSWER 4 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:510200 HCAPLUS Full-text

DOCUMENT NUMBER: 145:27761

TITLE: Preparation and uses for flavonoid complexes

INVENTOR(S): Carola, Christophe; Toullec, Anne; Buchholz, Herwig

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006056297	A2	20060601	WO 2005-EP11738	20051103

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: DE 2004-102004056900A 20041125

OTHER SOURCE(S): MARPAT 145:27761

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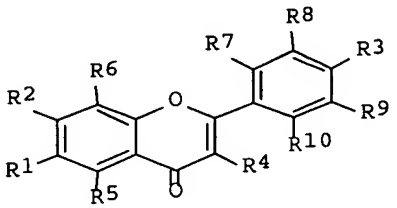

I

AB The invention relates to complexes of specific flavonoid derivs., [I]o[CD]p [R1, R2 = H, OR11; OR11 = OH, straight-chain or branched C1-20-alkoxy, C3-20 alkenyloxy, C1-20 hydroxyalkoxy, the hydroxy group(s) being optionally bonded to primary or secondary carbon atoms of the chain and the alkyl chain being optionally interrupted by oxygen, and/or C3-10-cycloalkoxy, and/or C3-12-cycloalkenyloxy, the rings being optionally bridged by (CH2)n (n = 1 to 3), and/or monoglycosyl radicals and/or oligoglycosyl radicals, provided that at least one of the radicals R1 and R2 represents OR11; while R3 to R10 can be identical or different and independently represent radicals that are largely inert regarding UV properties; CD = cyclodextrins;o = 1; p = 0.5 - 50]. Also disclosed are prepns. containing such complexes, corresponding methods for producing the inventive complexes and the prepns. containing the same, as well as the use thereof, especially for nourishing, preserving, and improving the overall condition of skin or hair and providing protection from light.

L34 ANSWER 5 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:494533 HCAPLUS Full-text

DOCUMENT NUMBER: 144:495394

TITLE: Preparation containing oxidized flavonoid derivatives and use in cosmetic, dermatological and food supplements formulations

INVENTOR(S): Carola, Christophe; Huber, Sylvia; Buchholz, Herwig

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006053637	A1	20060526	WO 2005-EP11687	20051102
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
DE 102004055932	A1	20060608	DE 2004-102004055932	20041119
PRIORITY APPLN. INFO.:			DE 2004-102004055932A	20041119
OTHER SOURCE(S):	MARPAT 144:495394			

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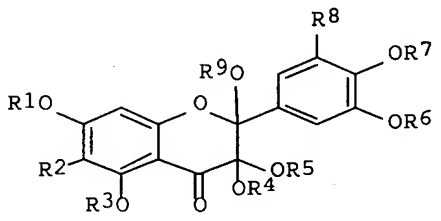


I

AB The invention relates to novel prepns., in particular, cosmetic and/or pharmaceutical prepns. or food supplements, containing at least one oxidized flavonoid derivative of formula (I), to novel oxidized flavonoid derivs. and to novel uses of these oxidized flavonoid derivs. Thus quercetin was oxidized in 1-butanol in the presence of copper chloride to obtain 2-butoxy-2-(3,4-dihydroxyphenyl)-3,3,5,7-tetrahydroxy chroman-4-one. The product was included as a 0.5 weight/weight% component in a lotion that further contained (weight/weight%): polyglyceryl-2-dipolyhydroxystearate 5.0; beeswax 0.5; zinc stearate 0.5; hexyl laurate 9.0; cetyl isononanoate 6.0; shea butter 0.5; DL-alpha-tocopherol acetate 1.0; glycerin 5.0; magnesium sulfate heptahydrate 1.0; preservative q.s.; water to 100.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 6 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:193924 HCAPLUS Full-text
DOCUMENT NUMBER: 144:260114
TITLE: Composition containing a dihydroxyacetone precursor
INVENTOR(S): Mujica, Teresa; Carola, Christophe ; Huber, Sylvia; Buchholz, Herwig
PATENT ASSIGNEE(S): Germany
SOURCE: U.S. Pat. Appl. Publ., 18 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2006045856	A1	20060302	US 2004-930778	20040901
DE 102004049605	A1	20060316	DE 2004-102004049605	20041012
WO 2006024361	A1	20060309	WO 2005-EP8525	20050805

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2004-930778 A 20040901
OTHER SOURCE(S): MARPAT 144:260114

AB The invention relates to a cosmetic or dermatol. composition containing at least one precursor of a substance whose active form is sought for its cosmetic activity. One of the applications of the invention relates to compns. capable of rapidly imparting to the skin a color similar to that obtained on prolonged exposure to UV, solar or artificial radiation, while at the same time avoiding the drawbacks of such an exposure (erythema, burning, loss of elasticity, appearance of wrinkles, premature ageing of the skin, and the like).

L34 ANSWER 7 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:168303 HCAPLUS Full-text
DOCUMENT NUMBER: 144:232807
TITLE: UV filtering compounds and their preparation and use in cosmetics
INVENTOR(S): Carola, Christophe; Pfluecker, Frank; Buchholz, Herwig; Driller, Hansjuergen; Neunhoeffer, Hans; Blyumin, Evgeniy, V.
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 138 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006018104	A1	20060223	WO 2005-EP8141	20050727

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102004039281 A1 20060223 DE 2004-102004039281 20040813
PRIORITY APPLN. INFO.: DE 2004-102004039281A 20040813

AB Compds. described by the general formulas YOCH2C(:O)CH2XSpR (I) and YOCH2CH(OH)CH2XSpR (II) (X = O, S(O)m, or NR1; Y = R1, [Si(R2)2]qSiR3R4R5, or Sp-R; R1 = H, C1-30 alkyl, or R; R2-5 = independently selected C1-30 alkyl; Sp = -(CH2)n-, -(CH2)n-C(:O)-(CH2)o-, or -(CH2)n-C(:O)-(CH2)o-X-(CH2)p-; m = 0, 1, or 2; n, o, p, q = independently selected whole nos. in the range 0-40; and R = independently selected at each occurrence from UV-absorbing substituents having conjugated π electron systems with ≥4 π electrons which may be substituted with ≥1 -Sp-X-CH2-C(:O)-CH2OH groups) are claimed. The use of II in the preparation of I, and methods for preparing both I and II, are also described. Compns. incorporating the compds. in an appropriate vehicle are described, as are processes for preparing the compns. by mixing the compds. with an appropriate vehicle and other components. The use of the compds. and prepns. for prophylaxis against time- and/or light-induced aging of human skin and hair and for the reduction or prevention of the damaging effects of UV radiation on the skin.

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

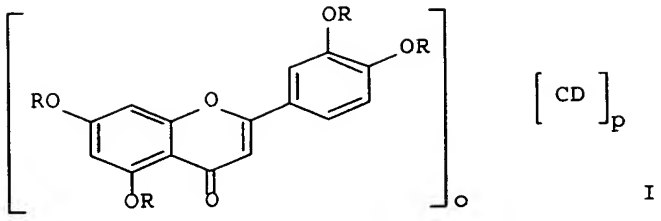
L34 ANSWER 8 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:164854 HCAPLUS Full-text
DOCUMENT NUMBER: 144:234882
TITLE: Flavonoid complexes with cyclodextrins for skin and hair care.
INVENTOR(S): Buchholz, Herwig; Rosskopf, Ralf; Carola, Christophe
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006018078	A1	20060223	WO 2005-EP7547	20050712

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

DE 102004038728 A1 20060302 DE 2004-102004038728 20040810
PRIORITY APPLN. INFO.: DE 2004-102004038728A 20040810
OTHER SOURCE(S): MARPAT 144:234882
GI



I

AB Complexes I (R = H, CH3CO, or optionally branched C1-18 alkyl or hydroxyalkyl, CD = α-, β- or γ-cyclodextrin, o = 1 and p = 0.5 - 3) are used in compns. containing also antioxidants and UV-absorbers for preservation or improvement of the general condition of the skin or hair. Thus, heating a solution 3.1 g 2-hydroxypropyl ether γ-cyclodextrin in 25 mL water at 50°, adding a solution 0.25 g luteolin on 25 mL ethanol, mixing 3 days at 50°, removing ethanol and drying in vacuum at 40° and 200 mbar gave 1.71 g of the complex consisting of 1 mol luteolin and 2 mol γ-cyclodextrin used for skin lotion manufacture

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 9 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1329573 HCAPLUS Full-text
DOCUMENT NUMBER: 144:56946
TITLE: Inorganic particles functionalized with organic compounds for use in cosmetic formulations
INVENTOR(S): Walenzyk, Thomas; Carola, Christophe; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 107 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005120440	A1	20051222	WO 2005-EP5179	20050512

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2004-13515 A 20040608
OTHER SOURCE(S): MARPAT 144:56946

AB The invention relates to a particle comprising an inorg. network and organic compds. which are covalently bonded to the network by means of a spacer group, the organic compds. being inside the particle and optionally on the surface of the particle. The invention also relates to methods for producing said particle, and to the uses thereof in formulations and prepns., especially in

prepns. having light protection properties. Thus 2-hydroxy-4-(3-triethoxysilylpropoxy)-diphenylketone was prepared from 4-allyloxy-2-hydroxybenzophenone and triethoxysilane in dry toluene in the presence of a vinyl-siloxane-complex hydrosilylation catalyst. The product was copolymd. with tetraethoxysilane in a mixture of ethanol-water-ammonia; SiO2 monospheres were obtained with 2-hydroxy-4-(3-triethoxysilylpropoxy)-diphenylketone in the core of the particles; the medium diameter of the particles was 100 nm. The particles were included as a 5 weight/weight% ingredient in a skin protecting formulation; further components were (weight/weight%): Emulsifier E 2155 3.00; Teginacid H 3.00; Imwitor 900 3.00; Lunacera M 1.00; Luvitol EHO 11.50; Cetiol 6.00; 1,2-Propanediol 4.00; allantoin 0.20; preservative q.s.; water to 100.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 10 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1125499 HCAPLUS Full-text
DOCUMENT NUMBER: 143:407336
TITLE: Chromone complexes
INVENTOR(S): Carola, Christophe; Buchholz, Herwig ; Rosskopf, Ralf
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Ger. Offen., 58 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 102004016250	A1	20051020	DE 2004-102004016250	20040402
WO 2005097772	A1	20051020	WO 2005-EP2369	20050307

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: DE 2004-102004016250A 20040402

AB Chromone complexes useful in the care of skin and hair contain cyclodextrins and chromone derivs. of specified structure. The reaction of 2,4,6-trihydroxyacetophenone with Ac2O and NaOAc gave 5,7-diacetoxy-3-acetyl-2-methylchromen-4-one, refluxing of which with 10% aqueous Na2CO3 gave 5,7-dihydroxy-2-methylchromen-4-one, reaction of which (0.2 g) with 3.4 g (hydroxypropyl)-γ-cyclodextrin in EtOH at 50° gave 3.45 g 1:2 chromenone-cyclodextrin complex. Use of the complex in a skin lotion is exemplified.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 11 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:567690 HCAPLUS Full-text
DOCUMENT NUMBER: 143:229691
TITLE: Chromone derivatives which bind to human hair
AUTHOR(S): Walenzyk, Thomas; Carola, Christophe; Buchholz, Herwig; Koenig, Burkhard

CORPORATE SOURCE: Institute for Organic Chemistry, University of Regensburg, Regensburg, D-93040, Germany
SOURCE: Tetrahedron (2005), 61(31), 7366-7377
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 143:229691
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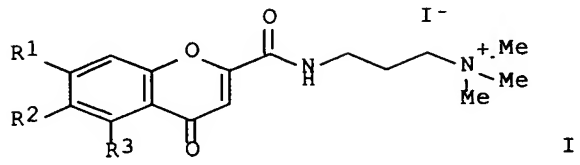


I

AB Chromones I (R1 = H, HO, MeO; R2, R3 = H, MeO), bearing a quaternary ammonium functionality and capable to bind to human hair, were synthesized. The radical scavenging activity, according to the DPPH (2,2-diphenyl-1-picrylhydrazyl) assay, of these chromones is considerably lower compared to flavonoids. The compds. show interesting UV absorption properties that depend on the position of a methoxy substituent. A bathochromic shift of 29 nm was observed when the methoxy group on the ammonium salts were shifted from position 7 to position 6.

REFERENCE COUNT: 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 12 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:553219 HCAPLUS Full-text
DOCUMENT NUMBER: 144:298816
TITLE: Synthesis of mono-dispersed spherical silica particles containing covalently bonded chromophores
AUTHOR(S): Walenzyk, T.; Carola, C.; Buchholz, H.; Koenig, B.
CORPORATE SOURCE: Institut fuer Organische Chemie, Universitaet Regensburg, Regensburg, D-93040, Germany
SOURCE: International Journal of Cosmetic Science (2005), 27(3), 177-189
CODEN: IJCMDW; ISSN: 0142-5463
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Organic-inorg. UV active hybrid materials have been prepared by a sol-gel process from benzophenone derivs. and tetraethylorthosilicate. The silica particles are spherical in shape and have a narrow size distribution which remains unchanged up to organic chromophore concns. of 0.2 mmol g-1. At higher concns. the spheres become less regular and fuse. A dependence of the material absorption properties on the particle size (at the same organic chromophore concentration) and on the concentration of surface grafted chromophores was noted. The most effective UV filter materials were found in a combination of silica incorporated chromophores and surface grafted chromophores at an overall low chromophore concentration A comparison of the photostability of chromophores at standardized UV irradiation revealed an

increase in stability for silica incorporated and surface immobilized benzophenone compared to benzophenone in a homogeneous solution

REFERENCE COUNT: 62 THERE ARE 62 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 13 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:523440 HCAPLUS Full-text
DOCUMENT NUMBER: 143:47767
TITLE: [5-Hydroxy-7-methoxy-2-(4'-methoxyphenyl)-4-oxo-4H-chromene-8-yl]-sulfonic acid monoester and flavonoid extracts from Sidastrum that contain it or its derivatives for use in cosmetic and dermatological compositions and as dietary supplements
INVENTOR(S): Buchholz, Herwig; Wirth, Corinna; Carola, Christophe; Alves Fontes, Rosane
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005054222	A2	20050616	WO 2004-EP12538	20041105
WO 2005054222	A3	20050811		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10357004	A1	20050630	DE 2003-10357004	20031205
EP 1689734	A2	20060816	EP 2004-819579	20041105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				

PRIORITY APPLN. INFO.: DE 2003-10357004 A 20031205
WO 2004-EP12538 W 20041105

AB The invention concerns [5-hydroxy-7-methoxy-2-(4'-methoxyphenyl)-4-oxo-4H-chromene-8-yl]-sulfonic acid monoester, its salts and solvates, exts. from Sidastrum containing these substances and their use for cosmetic, pharmaceutical and dietary compns. Oxidative stress , allergy and inflammation of the skin can be prevented and treated. Thus a W/O lotion contained (weight/weight%): polyglyceryl-2-dipolyhydroxystearate 5.0; beeswax 0.5; zinc stearate 0.5; hexyllaurate 9.0; cetylisononanoate 6.0; shea butter 0.5; DL-tocopherol acetate 1.0; [5-hydroxy-7-methoxy-2-(4'- methoxyphenyl)-4-oxo-4H-chromene-8-yl]-sulfonic acid monoester 0.5; glycerin 5.0; magnesium sulfate heptahydrate 1.0; preservative q.s.;; water to 100.

L34 ANSWER 14 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:393971 HCAPLUS Full-text
DOCUMENT NUMBER: 142:416816
TITLE: Cosmetic and pharmaceutical compositions containing

ascorbyl benzoates as antioxidants and method for preparation

INVENTOR(S): Mujica-Fernaud, Teresa; Carola, Christophe; Brunner, Marcus; Huber, Sylvia; Buchholz, Herwig

PATENT ASSIGNEE(S): Merck Patent GmbH, Germany

SOURCE: Eur. Pat. Appl., 55 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1527777	A1	20050504	EP 2004-21292	20040908
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
JP 2005132842	A2	20050526	JP 2004-315233	20041029
US 2006039937	A1	20060223	US 2004-975669	20041029
PRIORITY APPLN. INFO.:			DE 2003-10351342 A	20031031
			US 2004-574716P P	20040527

OTHER SOURCE(S): MARPAT 142:416816

AB The invention concerns antioxidant cosmetic and pharmaceutical formulations that contain ascorbic acid derivs. of benzoic acid esters. The antioxidants can be included in sunscreens, in skin lightening products or used for treatment and prophylaxis of ischemic perfusion after organ transplantation and heart attacks. The compns. can include addnl. antioxidants. Thus L-ascorbyl 6-gallate was synthesized from gallic acid and ascorbic acid in concentrate sulfuric acid and included in a W/O emulsion as a 5 weight/weight% component. Further ingredients were (weight/weight%): UV-pearl, OMC 30; polyglyceryl-3-dimerate 3; cera alba 0.3; hydrogenated castor oil 0.2; liquid paraffin 7; caprylic/capric triglyceride 7; hexyl laurate 4; PVP-eicosene copolymer 2; propylene glycol 4; magnesium sulfate 0.6; tocopherol 0.5; tocopheryl acetate 0.5; cyclomethicone 0.5; propylparaben 0.05; methylparaben 0.15; water to 100.

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 15 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:182648 HCAPLUS Full-text

DOCUMENT NUMBER: 142:280056

TITLE: Preparation of chromen-4-one derivatives for use in cosmetic and dermatological products

INVENTOR(S): Carola, Christophe; Buchholz, Herwig

PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany

SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005019197	A1	20050303	WO 2004-EP8043	20040719
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,				

NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

DE 10337862	A1	20050317	DE 2003-10337862	20030818
EP 1656364	A1	20060517	EP 2004-741136	20040719
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1835940	A	20060920	CN 2004-80023579	20040719
PRIORITY APPLN. INFO.:			DE 2003-10337862 A	20030818
			WO 2004-EP8043 W	20040719

OTHER SOURCE(S): CASREACT 142:280056; MARPAT 142:280056
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to compds. that are selected from the compds. of formulas I [R1, R2 = H, C(:O)R7, C(:O)OR7, (un)branced C1-20-alkyl, C3-20-alkenyl, C1-20-hydroxyalkyl (primary or secondary OH), C3-10-cycloalkyl, C3-12-cycloalkenyl; R3 = H, (un)branced C1-20-alkyl; R4 = H, OR8; R5, R6 = H, OH, (un)branced C1-20-alkyl, C3-20-alkenyl, C1-20-hydroxyalkyl; R7 = H, (un)branced C1-20-alkyl, polyhydroxy compd, (e.g., ascorbic acid, glycoside); R8 = H, (un)branced C1-20-alkyl] II and III, and to their production and use in cosmetic and dermatol. products. Thus, L-ascorb-6-yl 5,7-dihydroxy-4-oxo-4H-chromen-2-carboxylate (IV) was prepared from 2,4,6-trihydroxyacetophenone via cyclocondensation with EtO2CCOCl in pyridine containing catalytic DMAP, saponification with Na2CO3 in EtOH, and esterification with (+)-L-ascorbic acid in the presence of H2SO4. Examples of dermatol. formulations containing IV are presented.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 16 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:155392 HCAPLUS Full-text
DOCUMENT NUMBER: 142:225267
TITLE: Synthesis and use of chromene-4-one derivatives for the care of skin and hair
INVENTOR(S): Carola, Christophe; Huber, Sylvia; Rosskopf, Ralf; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 42 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1508327	A1	20050223	EP 2004-15739	20040705
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
DE 10337863	A1	20050317	DE 2003-10337863	20030818
JP 2005060398	A2	20050310	JP 2004-236984	20040817

US 2005043398 A1 20050224 US 2004-920202 20040818
PRIORITY APPLN. INFO.: DE 2003-10337863 A 20030818
OTHER SOURCE(S): MARPAT 142:225267

AB The invention concerns the synthesis of chromene-4-one derivs. and their application in cosmetic and dermatol. compns. for protecting and treating skin and hair. Thus 5,7-diacetoxy-3-acetyl-2-methyl-chromene-4-one was prepared from 2,4,6-trihydroxyacetophenone and sodium acetate in acetic acid anhydride; the product was boiled with sodium carbonate to obtain 5,7-dihydroxy-2-methyl-chromene-4-one. The antiinflammatory activity of 5,7-dihydroxy-2-methyl-chromene-4-one was tested with the PGE2 assay. A W/O emulsion contained (weight/weight%): 5,7-dihydroxy-2-methyl-chromene-4-one 5; UV-pearl, OMC 30; polyglyceryl-3-dimerate 3; Cera alba 0.3; hydrogenated castor oil 0.2; liquid paraffin 7; caprylic/capric triglyceride 7; hexyl laurate 4; PVP/eicosene copolymer 2; propylene glycol 4; magnesium sulfate 0.6; tocopherol 0.5; cyclomethicone 0.5; propylparaben 0.05; methylparaben 0.15; water to 100.

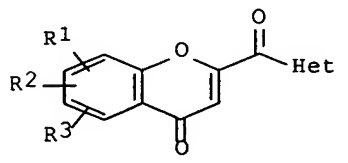
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 17 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:930955 HCAPLUS Full-text
DOCUMENT NUMBER: 141:395558
TITLE: Preparation of heteroaryl chromenones as inhibitors of tyrosine kinases and/or Raf kinases.
INVENTOR(S): Mujica-Fernaud, Teresa; Buchholz, Herwig; Rautenberg, Wilfried; Sirrenberg, Christian
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1473293	A1	20041103	EP 2004-7549	20040329
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK				
DE 10335782	A1	20041118	DE 2003-10335782	20030805
US 2004220182	A1	20041104	US 2004-833159	20040428

PRIORITY APPLN. INFO.: DE 2003-10319552 A 20030430
DE 2003-10335782 A 20030805

OTHER SOURCE(S): MARPAT 141:395558
GI



I

AB Title compds. [I; R1-R3 = H, OH, OA, PhO, Ar, O2CA, SO2H, SO3A, OSO2A, SO2A, halo, CO2H, CO2A, CONH2, NHSO2A, COA, CHO, SO2NH2; R1R2 = OCH2O, OCH2CH2O; Ar = (substituted) (unsatd.) (aromatic) mono- or binuclear heterocyclyl; A = (fluorinated) alkyl; Ar = (substituted) Ph, naphthyl, biphenyl], were prepared

Thus, 1-methylimidazole in THF at -78° was treated with BuLi and then with 6-hydroxy-2-ethoxycarbonylchromen-4-one (preparation given) in THF followed by stirring for 1 h to give 6-hydroxy-2-(1-methyl-1H-imidazol-2-carbonyl)chromen-4-one. The latter inhibited Raf with IC50 >1.0 μM.

L34 ANSWER 18 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:466702 HCAPLUS Full-text
DOCUMENT NUMBER: 141:38528
TITLE: Preparation of 2-benzoylchromone derivatives as inhibitors of the tyrosine kinase
INVENTOR(S): Mujica-Fernaud, Teresa; Buchholz, Herwig; Carola, Christophe; Sirrenberg, Christian; Rautenberg, Wilfried
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Ger. Offen., 22 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10256174	A1	20040609	DE 2002-10256174	20021202
EP 1426378	A1	20040609	EP 2003-25849	20031111
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004176440	A1	20040909	US 2003-725349	20031202
PRIORITY APPLN. INFO.:			DE 2002-10256174 A	20021202

OTHER SOURCE(S): CASREACT 141:38528; MARPAT 141:38528
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB New compds. I [R = OH, OA, OPh, Ar, OC(:O)A, SO3H, SO3A, OSO3H, OSO3A, OSO2A, SO2A, halogen (F, Cl, I, Br), CO2H, CO2A, CONH2, NHSO2A, COA, CHO, SO2NH2; RR = OCH2O, OCH2CH2O; A = (un)branched C1-10-alkyl, C1-10-fluoroalkyl; Ar = (un)substituted Ph; X = OH; XX = OCH2O, OCH2CH2O; n = 1 - 4; m = 1 - 5], their pharmaceutically acceptable derivs., solvates and stereoisomers, are inhibitors of the tyrosine kinase and can for the treatment by tumors, to the neuroprotection and for the protection of the stress proteins of the skin is used. The procedure for the preparation of I is characterized by: (a) hydroxyacetophenones II are cyclized with AOC(:O)C(:O)OA (A = C1-6-alkyl) to chromones III ; (b) hydrolysis of III to acid IV; (c) chlorination to acid chloride V ; (d) Friedel-Crafts acylation of PhRm. Thus, 5-Hydroxy-2-(2,4-dihydroxybenzoyl)chromone (VI) was prepared from 2,6-dihydroxyacetophenone via cyclocondensation with (EtO2C)2, hydrolysis with aqueous HCl in MeCO2H, chlorination with with (COCl)2 in CH2Cl2 containing catalytic DMF, then Friedel-Crafts acylation of resorcinol in THF containing AlCl3. Several drug dosage formulations are presented.

L34 ANSWER 19 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:247029 HCAPLUS Full-text
DOCUMENT NUMBER: 140:258652

TITLE: Preparation of trihydroxy and tetrahydroxy flavones with anti-oxidative properties for use in cosmetics and dietary supplements
INVENTOR(S): Carola, Christophe; Perruchon, Sophie; Buchholz, Herwig
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 33 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1400579	A2	20040324	EP 2003-18800	20030828
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
DE 10244282	A1	20040401	DE 2002-10244282	20020923
JP 2004115513	A2	20040415	JP 2003-328079	20030919
US 2004067894	A1	20040408	US 2003-667653	20030923
PRIORITY APPLN. INFO.:			DE 2002-10244282 A	20020923

OTHER SOURCE(S): MARPAT 140:258652

AB The invention concerns the synthesis of trihydroxy and tetrahydroxy flavones with anti-oxidative properties for use in cosmetics and dietary supplements; the antioxidants are used in combination with other antioxidants, e.g. vitamins A, C and E. Sunscreens can be added to the cosmetic formulations. Thus 6,3',4'-trihydroxy flavone was prepared by reacting lithium hydroxide with 2,5-dihydroxyacetophenone in dry THF at -78°C under argon atmospheric; 3,4-dimethoxybenzoic acid chloride was added. The reaction product was extracted, heated, recrystd.; the obtained 3',4'-dimethoxy-6-hydroxyflavone was reacted with boron tribromide. A W/O cosmetic emulsion contained (weight/weight%): 6,3',4'-trihydroxy flavone 5; UV-pearl, OMC 30; polyglyceryl-3-dimerate 3; cera alba 0.3; hydrogenated castor oil 0.2; paraffinum liquid 7; caprylic/capric triglyceride 7; hexyl laurate 4; PVP-eicosene copolymer 2; propylene glycol 4; magnesium sulfate 0.6; tocopherol 0.5; tocopheryl acetate 0.5; cyclomethicone 0.5; propylparaben 0.05; methylparaben 0.15; water to 100.

L34 ANSWER 20 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:55391 HCAPLUS Full-text
DOCUMENT NUMBER: 140:116957
TITLE: Cosmetic compositions for photoprotection comprising flavonoids
INVENTOR(S): Buchholz, Herwig; Carola, Christophe ; Perruchon, Sophie
PATENT ASSIGNEE(S): Merck Patent GmbH, Germany
SOURCE: Eur. Pat. Appl., 43 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1382329	A1	20040121	EP 2003-13429	20030623
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

DE 10232595	A1	20040205	DE 2002-10232595	20020718
JP 2004051637	A2	20040219	JP 2003-274648	20030715
US 2004091433	A1	20040513	US 2003-622123	20030718
US 7128900	B2	20061031		

PRIORITY APPLN. INFO.: DE 2002-10232595 A 20020718
OTHER SOURCE(S): MARPAT 140:116957

AB The invention concerns sunscreen compns. that contain flavonoids that are prepared by reacting a 2-hydroxyacetophenone compound with a lithium compound, followed by a reaction with a keto-compound Other sunscreens, antioxidants, and UV-filter stabilizers can be added. Thus 4'-methoxy-7-hydroxyflavone was synthesized starting from 2',5'-dihydroxyacetophenone and lithium hydroxyde in dry THF under argon atmospheric, followed by the addition of 4-methoxybenzoic acid hydrochloride. 4'-Methoxy-7-hydroxyflavone was used in a W/O emulsion as a 5 weight/weight% component; other ingredients were (weight/weight%): UV-pearl, OMC 30; polyglyceryl-3-dimer 3; cera alba 0.3; hydrogenated castor oil 0.2; liquid paraffin 7; caprylic/capric triglyceride 7; hexyl laurate 4; PVP/eicosene copolymer 2; propylene glycol 4; magnesium sulfate 0.6; tocopherol 0.5; tocopheryl acetate 0.5; cyclomethicone 0.05; propylparaben 0.05; methylparaben 0.15; water to 100.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L34 ANSWER 21 OF 21 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:695743 HCAPLUS Full-text
DOCUMENT NUMBER: 137:237418
TITLE: Cosmetic formulations containing flavonoid derivatives, especially tiliroside
INVENTOR(S): Wirth, Corinna; Buchholz, Herwig; Carola, Christophe
PATENT ASSIGNEE(S): Merck Patent G.m.b.H., Germany
SOURCE: PCT Int. Appl., 89 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002069926	A1	20020912	WO 2002-EP1200	20020206
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1363594	A1	20031126	EP 2002-710842	20020206
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2002007731	A	20040323	BR 2002-7731	20020206
JP 2004521133	T2	20040715	JP 2002-569104	20020206
US 2004081675	A1	20040429	US 2003-468708	20030821

PRIORITY APPLN. INFO.: DE 2001-10110105 A 20010302
WO 2002-EP1200 W 20020206
OTHER SOURCE(S): MARPAT 137:237418

AB The invention concerns cosmetic prepns. that contain flavonoid derivs., especially tiliroside derivs. for the use as sunscreen, antiaging agent, anti-

inflammatory agent, allergy inhibitor and to alleviate oxidative stress. Tiliroside can be a component of Sida glaziovii plant extract Thus tiliroside was sulfatized by reacting tiliroside with pyridine sulfone in sodium hydroxide-containing solution The sulfatized tiliroside sodium salt was used as a 1.0 weight/weight% ingredient in the aqueous phase of an W/O emulsion. Other ingredients were (weight/weight%): aqueous phase; glycerin 5.0; magnesium sulfate heptahydrate 1.0; preservative q.s.; water to 100; oily phase: polyglyceryl-2-dipolyhydroxystearate 5.0; beeswax 0.5; zinc stearate 0.5; hexyllaurate 9.0; cetylisononanoate 6.0; shea butter 0.5; DL-α-tocopherol acetate 1.0.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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